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POOLE'S

SEED & IMPLEMENT CO.

1507-9 Pacific Avenue, Tacoma, Washington



CATALOG
No. 23

Poole's High Quality Goods

PARCEL POST RATES

SIZE AND WEIGHT

A Parcel Post package may weigh from four ounces to seventy pounds for the first, second and third zones, and 50 lbs. for all other zones, and must not exceed in size 84 inches in length and girth combined.

Four ounces or less will be charged for at one cent per ounce or fraction thereof, except on books, seeds, plants, bulbs, etc., which are 1c for 2 ozs. up to 8 ozs. for any distance.

SEEDS, BOOKS, ETC.

Seeds, plants and books over 8 ozs. and other 4th class matter over 4 ozs. are charged at pound rates, a fraction being charged as a full pound.

Weight	—First Rate Local	Zone— Zone Rate 50 Miles	2nd Zone 50 to 150 Miles	3rd Zone 150 to 300 Miles	4th Zone 300 to 600 Miles	5th Zone 600 to 1000 Miles	6th Zone 1000 to 1400 Miles	7th Zone 1400 to 1800 Miles	8th Zone all over 1800 Miles
1 Pound	-----	First and Second Zone rate 5c for the first pound and 1c for each additional pound up to the weight limit—70 pounds.	Local Zone rate 5c for the first pound, 1c for each addi- tional two pounds up to the limit—70 pounds.	\$0.6	\$0.7	\$0.8	\$0.9	\$0.11	\$0.12
2 Pounds	-----			.08	.11	.14	.17	.21	.24
3 Pounds	-----			.10	.15	.20	.25	.31	.36
4 Pounds	-----			.12	.19	.26	.33	.41	.48
5 Pounds	-----			.14	.23	.32	.41	.51	.60
6 Pounds	-----			.16	.27	.38	.49	.61	.72
7 Pounds	-----			.18	.31	.44	.57	.71	.84
8 Pounds	-----			.20	.35	.50	.65	.81	.96
9 Pounds	-----			.22	.39	.56	.73	.91	1.08
10 Pounds	-----			.24	.43	.62	.81	1.01	1.20
11 Pounds	-----			.26	.47	.68	.89	1.11	1.32
12 Pounds	-----			.28	.51	.74	.97	1.21	1.44
13 Pounds	-----			.30	.55	.80	1.05	1.31	1.56
14 Pounds	-----			.32	.59	.86	1.13	1.41	1.68
15 Pounds	-----			.34	.63	.92	1.21	1.51	1.80
16 Pounds	-----			.36	.67	.98	1.29	1.61	1.92
17 Pounds	-----			.38	.71	1.04	1.37	1.71	2.04
18 Pounds	-----			.40	.75	1.10	1.45	1.81	2.16
19 Pounds	-----			.42	.79	1.16	1.53	1.91	2.28
20 Pounds	-----			.44	.83	1.22	1.61	2.01	2.40

REFERENCE TABLES

Quantity of Seed to Produce a Given Number of Plants and Sow an Acre

Quantity per acre		Quantity per acre	
Artichoke, 1 oz. to 500 plants	-----6 oz.	Horse Radish Roots	-----10,000 to 15,000
Asparagus, 1 oz. to 800 plants	-----1 bu.	Kale, 1 oz. to 5000 plants	-----4 oz.
Barley	-----2 to 2½ bu.	Kaffir Corn, in drills	-----6 to 8 lbs.
Beans, dwarf, 1 lb. to 100 ft. of drill	-----1 bu.	Kohl Rabi, 1 oz. to 100 ft. of drill	-----4 lbs.
Pole, 1 lb. to 100 hills	-----½ bu.	Leek, 1 oz. to 100 ft. of drill	-----4 lbs.
Beet, garden, 1 oz. to 100 ft. drill	-----7 lbs.	Lettuce, 1 oz. to 150 ft. of drill	-----3 lbs.
Mangel, 1 oz. to 75 ft. drill	-----5 lbs.	Millet, for seed, 12 lbs., for hay	-----20 lbs.
Broccoli, 1 oz. to 2000 plants	-----4 oz.	Melon, Musk, 2 oz. to 100 hills	-----2 to 3 lbs.
Brussels Sprouts, 1 oz. to 2000 plants	-----4 oz.	Water, 4 oz. to 100 hills	-----2 to 4 lbs.
Broom Corn, in drills	-----15 lbs.	Nasturtium, 1 oz. to 20 ft. of drill	-----
Buckwheat	-----½ to 1 bu.	Oats	-----2 to 3 bu.
Cabbage, 1 oz. to 2000 plants	-----4 oz.	Okra, 1 oz. to 100 ft. of drill	-----8 lbs.
Carrot, ½ oz. to 100 ft. drill	-----3 lbs.	Onion Seed, for sets	-----60 to 85 lbs.
Cauliflower, 1 oz. to 3000 plants	-----3 oz.	1 oz. to 150 ft. of drill	-----4 to 5 lbs.
Celery, 1 oz. to 5000 plants	-----4 oz.	Onion Sets, 1 qt. to 40 ft. of drill	-----8 bu.
Cheat	-----2 bu.	Parsnips, 1 oz. to 150 ft. of drill	-----3 lbs.
Chicory	-----4 lbs.	Parsley, 1 oz. to 150 ft. of drill	-----3 lbs.
Clover, Alsike and White	-----6 to 8 lbs.	Peas, Field	-----2 bu.
Alfalfa	-----15 to 20 lbs.	Garden, 1 lb. to 100 ft. of drill	-----1 to 2 bu.
Crimson Trefoil	-----10 to 15 lbs.	Pepper, 1 oz. to 1000 plants	-----
Red	-----10 to 12 lbs.	Pumpkin, ½ lb. to 100 hills	-----3 to 4 lbs.
Collards, 1 oz. to 2000 plants	-----4 oz.	Radish, 1 oz. to 100 ft. of drill	-----10 lbs.
Corn, Pop (shelled)	-----8 to 10 lbs.	Rape	-----3 to 5 lbs.
Sweet or Field, hills	-----12 to 20 lbs.	Rye	-----1½ to 2 bu.
For soiling, drills	-----2 bu.	Salsify, 1 oz. to 100 ft. of drill	-----6 lbs.
Cress, ¼ oz. to 100 ft. of drill	-----1 lb.	Speltz	-----100 lbs.
Cucumber, 1 oz. to 100 hills	-----2 to 3 lbs.	Spinach, 1 oz to 100 ft of drill	-----8 lbs.
Egg Plant, 1 oz. to 2000 plants	-----4 oz.	Sugar Cane in drills	-----10 lbs.
Endive, ¼ oz. to 100 ft. of drill	-----4 lbs.	Sunflower	-----8 lbs.
Flax, broadcast	-----¾ bu.	Squash, Summer, 4 oz. to 100 hills	-----3 lbs.
Grass, Blue, Kentucky	-----2 bu.	Winter, 8 oz. to 100 hills	-----4 lbs.
Meadow Fescue	-----1 bu.	Timothy	-----12 to 15 lbs.
Mixed Lawn	-----5 to 6 bu.	Tomato, 1 oz. to 2000 plants	-----4 oz.
Red Top	-----2 bu.	Tobacco, 1 oz. to 4000 plants	-----3 oz.
Red Top, solid seed	-----12 to 15 lbs.	Turnip, 1 oz. to 150 ft. of drill	-----2 to 3 lbs.
Grass—Orchard, Perennial, Rye, Red Top	-----	Vetches	-----2 bu.
Fowl Meadow, Wood Meadow	-----2 bu.	With grain	-----1 bu. each
		Wheat	-----1½ to 2 bu.

POOLE'S SEED AND IMPLEMENT COMPANY

1507-9 PACIFIC AVENUE

TACOMA, WASH.

While we exercise the greatest care to have all Seeds pure and reliable, and all Bulbs, Plants and Nursery Stock true to name, we do not give any warranty, express or implied, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms and conditions, they must be returned at once, and the money that has been paid for the same will be refunded.

POOLE'S SEED & IMPLEMENT CO.

NAME _____	DO NOT USE THESE SPACES
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STATION _____	Amt. _____
(If different from P. O.) DATE _____	Re. _____
COUNTY _____ STATE _____	Ack. _____
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State if wanted by Mail, Express, Freight or Steamer.	Card Made _____

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Remember—Add postage for Peas, Beans and Corn if wanted by mail

When and How to Order

USE ORDER BLANK in the front of your Catalog, carefully filling out the blank spaces at the top for shipping directions. Be sure to sign your name.

PRICES.—The prices named in this catalog are those prevailing at the time the catalog goes to press and are subject to market changes in value. Your order will be figured at the price prevailing at the time same is received and where lower you will be protected and refund made according to price. As prices usually advance on many items, toward the planting season, it will be to your advantage to order early.

OUR TERMS ARE STRICTLY CASH WITH ORDER where arrangements for credit have not been previously made.

 **Send MONEY** by Postoffice or Express Money Order, Bank Draft or Registered Letter. Postage stamps will be accepted for small amounts. Money sent in any other way is entirely at sender's risk.

NOTE CAREFULLY that seeds in packets, ounces and quarter pounds are **postpaid**; all other items are **F. O. B. Tacoma, Wash.**, unless the price is stated otherwise, and money should be sent to cover transportation if sent to a station without an agent or if sent parcel post, balances will be promptly returned. A compliance with this will save expense and annoyance and insure quicker delivery. **Advise how you want your goods shipped.**

SPECIAL QUOTATIONS ON LARGE ORDERS. Any dealer, market gardener, institution or individual wishing seed in large quantities, is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market prices. **A letter of inquiry may save you dollars** if you want to buy in quantity. If in need of something pertaining to agriculture not herein listed, write us before ordering elsewhere.

EXPRESS AND FREIGHT. Seeds sent by freight or express means that we deliver the goods to the express or railway company. The purchaser pays all transportation charges on goods. On moderate sized orders we advise express shipment rather than freight. Upon delivery of goods to transportation company, a sale is completed. In event of loss or damage to goods in transit the purchaser must have notation of such loss placed upon his receipt, and may then file claim for loss at his station, or may send the necessary papers to us when we shall gladly enter claim for him, remitting to him as soon as the claim is paid. Remember that our responsibility ceases on delivery in good order to the transportation company, and it is therefore imperative that every purchase be carefully examined for loss or damage before receiving it.

WE DO NOT GUARANTEE REPLACEMENT OF GOODS SENT BY MAIL. An additional remittance of five cents will insure any mail package.

PREPAY STATIONS. When you send in orders to go by freight or express be sure that you add money enough to pay freight charges if your station is a prepay point, which is always the case where there is no regular agent.

COMPLAINTS OR PRAISES. If you are well pleased with our goods and the manner of doing business, tell everyone. If you are not, tell us, so we can please you. Our best efforts will be put forth in filling all orders carefully and promptly in a way that will please you.

KEEP A COPY OF YOUR ORDER. Check goods when received. We use the greatest care in filling, checking and packing orders, but in spite of all, mistakes may occur. Should any happen in your order, advise us promptly, giving order number, and same will be promptly rectified. Do not return goods until you hear from us.

PRICES—*In these days of advancing prices, it is with pleasure that we call your attention to our pre-war prices on our seed packet goods. This is not done by lessening the size of the packet nor of reducing the quality of the seeds, for we use none but the best seeds in our packets. Our seeds are all tested for purity and germination and only those seeds that are above the standard are used. Our seeds are not sold on commission, therefore we do not have a quantity of unsold seeds returned to us or carried over. Packets are put up fresh each season and you can make no mistake in using POOLE'S Quality Seed.*



FERTILIZERS

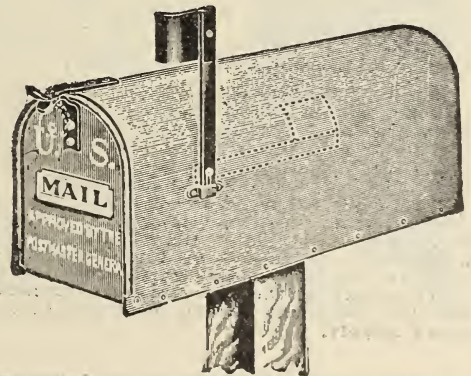
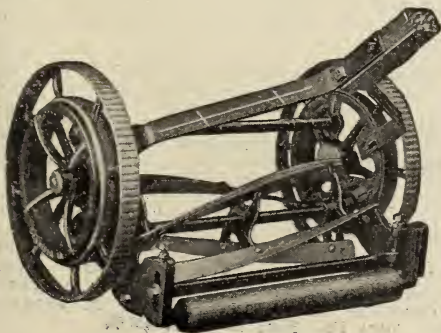
will restore and sustain the productiveness of your soil. They are an investment, not an expense, and will return many times their cost.

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WE STOCK PRACTICALLY EVERYTHING FOR THE FARM AND GARDEN—IF YOU DO NOT SEE IT HERE, WRITE US AND IF WE DO NOT HAVE IT WE WILL PROCURE IT FOR YOU



VEGETABLE SEEDS

We catalogue only the very best varieties of both the newer and the older strains, those that are especially adapted to the peculiar conditions on the Pacific Coast.

ASPARAGUS

Culture—Sow the seed thinly in rows 1 foot apart in April or May (4 or 5 lbs. to the acre), and keep down all weeds. To secure strong, healthy plants, thin the seedlings to 3 or 4 inches in the rows, saving only the strongest. The one-year-old plants should be set out in spring in rich, sandy loam, dug 18 inches deep, into which has been worked plenty of well-rotted manure. If a stiff clay is all that can be had, add plenty of sand and sifted coal-ashes to loosen it up, and see that it is well under drained. In planting for private use, set out in beds 5 feet wide, three rows in a bed, the outer being each 1 foot from the edge, and allow 18 inches between the rows; set the plants from 4 to 6 inches below the surface. If set out in autumn, top-dress with 6 inches of manure. For market, on a large scale, set out 4 by 1½ feet. Every fall apply a good dressing of coarse manure, after the tops have been cut, and in spring fork in. Never cut too closely. The roots need the benefit of some foliage during the year, else they will weaken and die. Slugs are easily destroyed by applying air-slaked lime or paris green. **Asparagus from seed does not always come true to name.**

Colossal—The approved standard sort. The famous **Argenteuil** of the French is identical with it. **Oz., 15c; ¼-lb., 35c; lb., \$1.00.**

Palmetto—Of southern origin; a very desirable, bright green Asparagus. **Oz., 15c; ¼-lb., 35c; lb., \$1.00.**

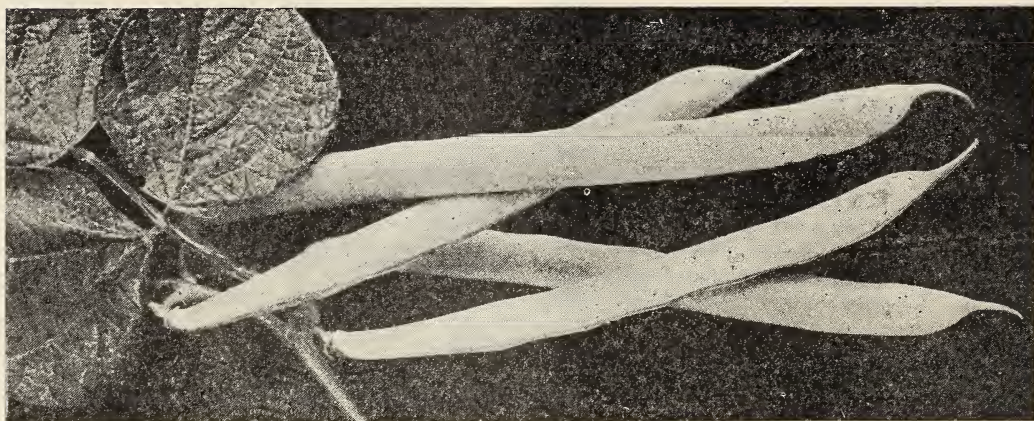
Columbian Mammoth—Very large shoots. **Oz., 15c; ¼-lb., 35c; lb., \$1.00.**

All 5 cents per packet.

Palmetto—2-year-old roots. **Doz., 25c; 50, 75c; 100, \$1.25.**



BEANS



DWARF OR BUSH—YELLOW PODDED

When ordering Beans by mail, add to cover postage.

CULTURE—About the first of May, if the ground is perfectly warm, select a warm, dry, sheltered spot, dig and manure slightly; make drills 2 inches deep and 18 inches to 2 feet apart; drop the beans 3 inches apart in the drills, and cover not more than 2 inches deep. Hoe well in dry weather to keep down the weeds. Sow every two weeks for a succession. One quart to 100 feet of drill; one bushel to the acre, in drills.

Improved Golden Wax—One of the most popular garden varieties in cultivation. Pods are long, nearly straight, broad and flat, and golden-yellow; seed white, more or less covered with two shades of purplish red. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

Wardwell's Kidney Wax—A hardy, strong growing vine; handsome, long podded variety. A few days later than Golden Wax; pods long, golden-yellow, brittle and entirely stringless; seeds white, with dark markings about the eye. Market gardeners find this bean one of the most profitable. **Can't supply.**

Prolific Black Wax—An improvement on the old Black Wax or Butter Bean. Very vigorous and prolific; pods fairly long, golden-yellow, very brittle, and stringless; seed black. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

Davis Kidney Wax—The most hardy and productive wax bean. The pods are long, white, straight, crisp and tender. The vine is rustless and very vigorous, bearing the pods in clusters. For canning this is unexcelled on account of purity of the pod and bean. It is a remarkably good variety for shipping; seed white, and on this account is desirable for a shelled bean in winter. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

BEANS—Continued

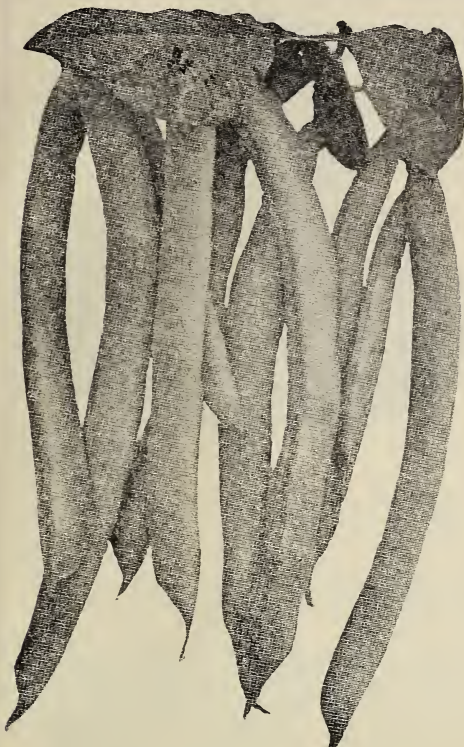
DWARF OR BUSH—GREEN PODDED KIND
When Ordering Beans by Pound or Over to Be Forwarded by Mail—Add Postage

Stringless Green Pod—The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than any other green-podded bean. It is of immense value, not only to the market gardener, but also for those who seek early beans of a rare quality for the home table. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

Dwarf Horticultural, or "Cranberry Bean"—Grows erect, strong and shrubby, and is very prolific. The bean is highly prized, green shelled. It is rather large, plump, and beautifully mottled yellow and red; one of the most delicious and desirable beans and a great favorite with market gardeners. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

Refugee, or Thousand to One—Of great value on account of its hardiness, vigorous growth and wonderful productiveness. It is not excelled by any other variety as a snap bean, and is considered the best for pickling or canning. Beans small, dark purple, veined brown. Pods of perfect form, dark green; veined purple. Pkt., 10c; lb., 30c; 10 lbs. \$2.50.

Canadian Wonder—This splendid bush bean is the largest, most prolific of the green-podded sorts, and is entirely stringless in its early development. Comes a little later than the New Stringless Green Pod, but continues in bearing throughout the season, and is excellent shelled green. Pkt., 10c; lb., 30c; 10 lbs. \$2.50.



Stringless Green Pod

Early Long Yellow Six Weeks—A long podded green variety. Plants strong and vigorous. Full and flat pods. Excellent for market gardeners. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

Broad Winsor—Stalk erect, strong and shrubby. The bean is large, broad and flat; should be planted early and is best green shelled. An English variety. Pkt., 10c; lb., 30c.

Castor Bean—Used for medicinal purposes and by some claimed to keep moles away. Castor beans are very ornamental, the plants and foliage being large and tropical in appearance. Pkt., 10c; lb., 50c.

BURPEE'S BUSH LIMA—A bush form of the large, flat Pole Lima, growing only 18 to 20 inches high. The beans are borne very profusely. Pkt., 10c; lb., 30c.

Lady Washington Field Bean—An improvement over the old Navy Bean; is earlier, larger and more productive. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

POLE OR RUNNING BEANS

Kentucky Wonder—This grand pole bean continues to be a great favorite. It is perfectly suited to this climate. Medium early, and enormously productive. Very large, long pods that cook tender and melting, and when once matured the green shelled beans are excellent. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

Dutch Case Knife—A little later. Has large, green, flat pods; good for "snap" or shelled green. The large Lima beans are too late for our climate, and the Dutch Case Knife is the nearest approach to them of any here. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

Scarlet Runner—Especially used as a flowering bean. Pkt. 10c; lb., 35c.


Lazy Wife—Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless; of unusually rich flavor. Dry beans, pure white; excellent for winter use. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

Horticultural Pole—Good as a snap or as a shell bean; one of the old standards and still very popular. Pods short, pale green, becoming splashed with brownish red. Pkt. 10c; lb., 30c; 10 lbs., \$2.50.

Kentucky Wonder Wax—The Pride of the Garden. It commences to bear when scarcely higher than the average bush variety. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

OREGON POLE LIMA

The Only Lima Bean that Will Thrive in Our Cool Climate. Price, Pkt., 10c; lb., 30c.



Tall Pole Horticultural

BEET

CULTURE—Sow as early in the spring as the ground can be worked (one ounce to 50 feet of drill, five or six pounds to the acre), and every two weeks after for a succession up to the first week of July. For general crop, sow about the middle of May. The soil should be light, sandy loam, well enriched with stable manure and plowed and harrowed until very fine. Sow in drills 1 foot to 15 inches apart, and when well up, thin to from 4 to 6 inches. The young beets, with their tops, pulled out of the row, are excellent used as a spinach. For this purpose, sow frequently and use when of the size of a hickory nut.

Extra Early Egyptian—The best variety for forcing, and for market gardeners, being very early with small tops. Roots very dark red, rounded on top, but flat beneath, with very small tap roots. Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.

Detroit Dark Red Turnip—A fine beet for bunching for market; tops exceptionally small and uniformly upright. The roots are perfect turnip shape with small tap-roots. One of the deepest red beets. Quality is of the finest; sweet and tender, best beet for home gardens. Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.

Early Eclipse—One of the best early sorts. It possesses all the qualities requisite in a first-class beet, and is of a uniform, globular shape. The roots are a bright, glossy red, fine-grained and delicious. Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.

Crosby's Egyptian—Very popular early beet, as it reaches the desired size quickly. The beets are of good size, rather flat than round, and flesh dark. Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.

Crimson Globe—Globular shape; flesh rich, deep crimson; tender and sweet. Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.25.

Long Blood—The root is smooth and handsome, flesh brilliant in color and excellent quality. Good keeper. Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.



Extra Early
Egyptian
Beet

STOCK BEETS

CULTURE—As all Mangels require a deep soil in order to grow well, plow subsoil at least 1 foot to 18 inches. Sow in May or June, in rows 18 inches to 2 feet apart, and thin to 8 inches in the rows. Young plants may be transplanted to fill up vacancies. On 5 pounds or over, 5c pound less.

Danish Sludstrup—An improved variety, considered one of the best. Awarded first class certificate. Color reddish-yellow and of a distinct type. It is very hardy, grows well above ground; is easily pulled and very nutritious. Pkt., 5c; oz., 10c; ¼-lb., 20c; lb., 55c.

Improved Mammoth Long Red—Very popular and much used. A large and heavy cropper. Dark red skin, with whitish flesh; grows one-half or more above the surface; roots quite regular; attain a very large size. Pkt., 5c; oz., 10c; ¼-lb., 20c; lb., 55c.

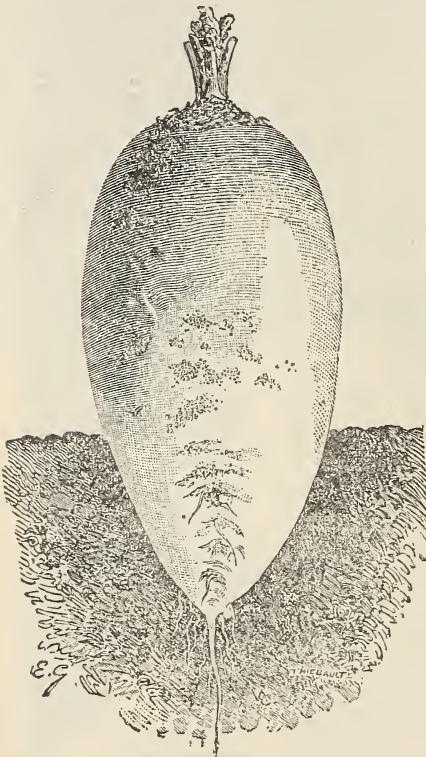
Golden Tankard—An enormous yielder of weight per acre, and at the same time very nutritious; flesh deep yellow; of fine shape, growing largely above soil, thus being easily harvested. Pkt., 5c; oz., 10c; ¼-lb., 20c; 1 lb., 55c.

Yellow Giant, Intermediate or Gate Post—Roots very large, growing over one-half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short. Its fine flesh never becomes woody and the crop is easily harvested. Pkt., 5c; oz., 10c; ¼-lb., 20c; lb., 55c.

Giant Half Sugar Mangel—A new variety, very much more valuable for feeding purposes than the old sorts, it being very much richer. Yields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beet. Roots long and thick and large, very smooth, with few rootlets and creamy white in color, with medium-sized top. Pkt., 5c; oz., 10c; ¼-lb., 20c; lb., 55c.

French White Sugar—The sugar beet most generally grown, as it combines, with heavy yield, from 10 to 13 per cent of sugar. Pkt., 5c; oz., 10c; ¼-lb., 25c; 1 lb., 75c.

Klein Wanzleben Sugar—This is the standard variety grown commercially for the production of sugar. Pkt., 5c; oz., 10c; ¼-lb., 25; lb., 75c.



SLUDSTRUP
Danish

SWISS CHARD

New Savoyed Leaf "LUCULLUS." An improved variety of "Swiss Chard," growing about two and a half feet high. The heavy stalks are over an inch thick and bare for more than a foot of their length. The leaves make the finest of "greens." By cutting back the leaves close to the ground tender shoots spring up quickly, these or the mid-rib are very delicious cooked as asparagus. Swiss chard is hardy, easily grown and should be in every garden. It is one of the most delicious of all vegetables. **Pkt. 5c, oz. 15c, ¼ lb. 35c, lb. \$1.00.**

BROCCOLI

CULTURE—Sow early sorts as soon as the ground can be worked in the spring, in shallow drills, drawn 3 or four inches apart. Plant out 2 feet apart each way when the plants are about 4 inches high. Cultivate the same as cabbage, in rich soil.

Early White—Resembles cauliflower; very white and sure to head. **Pkt., 5c; oz., 75c; ¼-lb., \$2.00.**

Mammoth White—A valuable variety with large, white heads, firm and of good flavor. **Pkt., 5c; oz., 75c; ¼-lb., \$2.00.**

BRUSSELS SPROUTS



CULTURE—Sow in May, in the same manner as cauliflower, and transplant in July, 1 foot apart in the rows which should be 1½ feet apart. The Brussels Sprout is, without exception, the very best winter vegetable that can be grown.

DWARF IMPROVED

A carefully grown strain, very hardy and giving compact, round sprouts of large size and good quality. **Pkt., 5c; oz., 35c; ¼-lb., \$1.10.**

CHERVIL

Curled—This plant is used for flavoring soups and salads, and has a strong perfume. **Pkt., 5c; oz., 25c; ¼-lb. 80c.**

COLLARDS

True Georgia—Used as "Greens" mainly in the South and West. As the leaves are pulled off, others grow in their places. **Pkt., 5c; oz., 20c; ¼-lb. 65c.**



Swiss Chard "Lucullus"

**FERTILIZERS INCREASE YIELD
AND PROFITS
SEE PAGES 35-37**

CHICORY

Witloof—Known in restaurants as French Endive. Sown in May and June in drills. Transplant or thin to 6 inches; treat as endive, except that in late summer or fall it should be gradually banked up like celery. The stalks, when blanched, make a delicious salad. It is also used by the French as a boiled vegetable. **Pkt., 5c; oz., 35c; ¼-lb., \$1.00; lb., \$3.00.**

CORN SALAD

Petticus, or Lamb's Lettuce—A refreshing salad, used extensively in winter and spring as a substitute for lettuce. It is often cooked like spinach. Sown in drills one foot apart, in the spring or fall. On the approach of cold weather cover over with straw or coarse litter. **Pkt., 5c; oz., 30c; ¼-lb., \$1.00.**

CABBAGE

CULTURE—The requisites for complete success are: First—Good seed. There is no other vegetable where the seed has so much influence on the quality of the product, and gardeners should always use the best procurable. Second—Rich, well prepared ground. Third—Frequent and thorough cultivation. A heavy moist and rich loam is most suitable, which should be highly manured and worked deeply. Cabbage is universally grown and specific directions regarding the time and method of planting applicable to all localities cannot be given. In general, the early sorts should be sown very early in hot beds, hardened off by gradually exposing to outside air, and as early as the ground is in good condition, transplanted, setting 18 to 36 inches apart, according to size of variety. The late Autumn and Winter varieties may be

sown from the middle to the last of Spring and transplanted when four to six inches high. Shade and water the late sowings in dry weather to get them up.

Early Jersey Wakefield—The earliest and hardest heading of first early cabbages. Most gardeners depend upon it for the bulk of their extra early crop. Its exceeding hardiness not only to resist cold but other unfavorable conditions, insures the greatest likelihood of profitable and satisfactory results.

Our stock is grown and selected with the greatest care; there is none better, and few as good. Head conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit of the variety make it the best sort for very early setting. **Highest quality seed. Pkt., 5c; oz., 30c; ¼-lb., \$1.00; lb., \$3.00.**

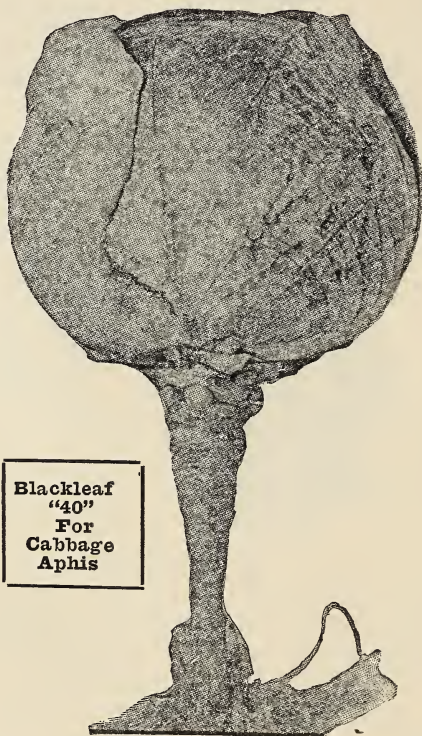
Copenhagen Market—A new extra early globe-shaped Cabbage slightly flattened. The large solid heads are very uniform, with few other leaves, keeps well and stands handling. **Copenhagen Market** originated in Denmark, where it is the favorite market variety, and we recommend it to our customers as the best early round head. Gardeners should give it a trial. Our stock is direct from the originator. **Pkt., 5c; oz., 40c; ¼-lb., \$1.25; lb., \$4.00.**

Early Winnigstadt—A desirable variety, having conical, solid heads; a sure header under almost any condition, and keeps better than most early varieties. Fine appearance and of excellent quality. **Pkt., 5c; oz., 30c; ¼-lb., \$1.00; lb., \$3.00.**

Large Wakefield or Charleston—The heads are of similar form, though not so pointed, but of equal solidity as the original Jersey Wakefield, while they grow half again as large, reaching full size about ten days later. **Per pkt., 5c; oz., 30c; ¼-lb., \$1.00; per lb., \$3.00.**

Early Summer—Large, solid, round, flattened, compact heads of excellent quality; the plant has a peculiar bluish tinge. **Pkt., 5c; oz., 30c; ¼-lb., \$1.00; lb., \$3.00.**

FERTILIZE your cabbage with **DIAMOND BRAND FERTILIZER**. 1000 lbs. per acre promotes a quick, even growth, developing crisp, solid Heads that command highest prices.



Blackleaf
"40"
For
Cabbage
Aphis

Danish Ballhead—Long Stem

CABBAGE—Continued

Danish Ball Head or Cannon Ball Long Stemmed—This is one of the hardiest cabbages in cultivation and endures both frost and drouth that would destroy other varieties.

Plants rather long-stemmed, but compact; leaves very smooth, but thick; head of medium size, round and very solid, being the hardest heading cabbage we know of, and of the very best quality. Matures quite late, keeps well, and is considered by many the best cabbage to hold over for Spring markets. Pkt., 5c; oz., 40c; ¼-lb., \$1.25; lb., \$4.00.

Danish Ballhead, or Cannon Ball—Short stem. Very round, solid winter sort, largely grown in Denmark for the London mar-

ket. A fine shipper. Pkt., 5c; oz., 40c; ¼-lb., \$1.25; lb., \$4.00.

Red Drumhead—A large, very solid, late red cabbage, much used in pickling. Good keeper and a favorite with the ladies. Pkt., 5c; oz., 45c; ¼-lb., \$1.35; lb., \$4.50.

Drumhead Savoy—This is the finest of the Savoy cabbages, and a general favorite; of excellent flavor, surpassing that of any other late cabbage. Stands freezing well. Pkt., 5c; oz., 40c; ¼-lb., \$1.25; lb., \$4.00.

Premium Late Dutch—Best for winter use; round or slightly flattened heads; stands freezing well. A good keeper and of excellent quality. Pkt., 5c; oz., 30c; ¼-lb., \$1.00; lb., \$3.00.

CARROTS



Danver's Half Long—Grown largely on account of its productiveness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, handsome roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts and are more easily harvested. Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.

Early Scarlet Horn—The best early kind for general use. It is larger than the forcing variety, but fully as good in quality, and produces a much larger crop. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

Oxheart—A thick carrot, five or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor. Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.

Chantenay—The market gardener's favorite. Tops, medium sized; necks, small; roots, tapering slightly, but uniformly stump-rooted and smooth; color, deep orange red; flesh, very crisp and tender. Although this is a medium early sort, it furnishes roots of usable size as early as any; is a heavy cropper, and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort. Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.

YELLOW GIANT, Specially Adapted to Moist, Heavy Soils—This new carrot originated at the Sydney, Australia, Experimental Station, and has proved itself to be the earliest and most productive stock carrot offered to date. It is a half long variety, with an immense broad shoulder. The carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is bright yellow, and is perfection itself for giving the proper color to butter. Every dairyman who wants a big crop of carrots of the right quality and easy of culture should plant our Yellow Giant. Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.

Large White Belgian—Extensively grown for stock feeding; very productive. Grows so much above the ground that the entire crop can be pulled by hand. Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.

CULTURE—A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the Spring as the ground is fit to work, though good crops may be grown as late as June 15. For table use, sow the smaller kinds in rows 16 to 18 inches apart, and for field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart. Cover one-half to one inch deep and see to it that the soil is well firmed above the seed.

Orange, Improved Long—Popular for farm use on deep, mellow soil. Our stock is an improvement obtained by years of careful selection of the best formed and deepest colored roots, which grow to a large size, some specimens averaging twelve inches in length. Enormous crops can be grown under fair culture; one of the best varieties for feeding stock. Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.

We Pay Postage on All Garden Seeds Bought by the Packet, Ounce or Quarter-Pound

CAULIFLOWER

CULTURE—The same as for cabbage, except that extra manure and plenty of water will pay upon cauliflower. If the soil be dry, water frequently, and, if the plants have a heavy mulch of hay or straw, it will keep the soil moist, and they will not suffer from drought. The early kind should be strong enough to plant out not later than the middle of April; the late kinds may be planted out the same time as cabbage.

Early Snowball—This variety is much in demand by market gardeners for main crop. Its earliness, compact habit, large-sized heads and snow-white color recommend it to every grower as a variety of special merit. We have an extra selected stock of this sort, and recommend it with the greatest confidence.

Pkt., 15c; ¼-oz., 75c; ½-oz., \$1.40; oz., \$2.50.

Poole's Gilt-Edge Cauliflower—Best and surest of all. Produces large, heavy, solid, white heads of finest quality. Undoubtedly the best variety. **Pkt., 15c; ¼-oz., 75c; ½-oz., \$1.40; oz., \$2.50.**

EXTRA EARLY PARIS

This is the dwarfest and earliest heading of all. Heads are solid, but are not so large nor sure-heading as the Erfurt type. **Per Pkt., 10c; ¼-oz., 35c; ½-oz., \$1.00; oz., \$1.75.**

DANISH GIANT—DRY WEATHER CAULIFLOWER

Danish Giant is an early, large, solid white Cauliflower than can successfully withstand a drouth that would prove fatal to other varieties and will thrive splendidly in dry sections, being peculiarly adapted to their growing conditions, but like all cauliflower must have rich soil and cultivation to give best results. **Danish Giant** can also be grown under moist conditions and is a dependable market variety. **Pkt., 15c; ¼-oz., 75c; ½-oz., \$1.40; 1oz., \$2.50**

LARGE ALGIERS

A valuable late sort, sure to head, of the best quality and very popular with market gardeners everywhere. Plants large, but of upright growth, the leaves protecting the heads so that they will endure, uninjured, a frost that would ruin other sorts. One of the very best of the late varieties. **Pkt., 10c; ¼-oz., 40c; ½-oz., 75c; oz., \$1.35.**

AUTUMN GIANT

The heads are white, large, compact and thoroughly protected by foliage. **Pkt., 10c; ¼-oz., 35c; ½-oz., 65c; oz., \$1.25.**

CRESS

Curled or Pepper Grass—This salad is much used with lettuce, to which its warm, pungent taste make an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early. **Pkt., 5c; oz., 20c; ¼-lb., 50c; 1b., \$1.50.**

True Water

One of the most delicious of small salads, and should be planted wherever a suitable place can be found. The seed should be sown and lightly covered in gravelly, mucky lands, along the borders of small, rapid streams. Under favorable conditions they increase very rapidly by self-sown seed and extension of the roots. **Pkt., 5c; oz., 60c; ¼-lb., \$2.00.**

CELERY

CULTURE—Sow the seed early, about February, in a hot-bed or cold frame. When three inches high, transplant, setting them four inches apart. When grown six inches, and fine, stocky plants, set in richly manured, deep soil, in rows three and a half feet apart and about nine inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Blanch by placing boards along the rows, or earth up a little, and continue doing so at intervals until only the tops of the leaves are visible late in Autumn. **Never hoe up the earth when plants are wet.** One ounce of seed produces about six thousand plants.

White Plume, the Leading White Celery—A handsome, crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white, so that by closing the stalks either by tying or by simply drawing the soil up against the plant and pressing it together, the work of blanching is completed without the troublesome process of "banking" or "earthing up." It is the earliest celery known. **Pkt., 5c; oz., 25c; ¼-lb., 75c; 1b., \$2.50.**

Planet Jr. Drills and Cultivators

A Planet Jr. Seeder will soon save enough seed to pay for itself; gives a better stand and makes cultivation easy. **Saves time and money.**

DON'T practice false economy by buying low-priced seeds. We sell High Grade tested Seeds.

CELERY—Continued

Golden Yellow Self-Blanching—This is no doubt the best celery for early spring market use. Plants of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier. French grown. Pkt., 10c; oz., 50c; ¼-lb., \$1.75.

Winter Queen—This is without doubt the most valuable variety of celery for winter and spring use ever introduced. Has double the amount of heart of any known celery. The plant has a fine appearance, of compact growth, and blanches to a beautiful cream-white. Ribs perfectly solid, crisp and a delicious nutty flavor.

Stored for winter or spring use, it is an excellent keeper and when taken out the blanched stalks will be firm and crisp; entirely free from strings; brittle and of sweet flavor. Pkt., 5c; oz., 25c; ¼-lb., 75c; 1b., \$2.50.

Giant Pascal—Largest variety grown; of fine nutty flavor; very easily blanched. Pkt., 5c; oz., 25c; ¼-lb., 75c; 1b., \$2.50.

Celery Seed—For flavoring. Oz., 10c; ¼-lb., 20c; 1b., 65c.

CELERIAC

TURNIP ROOTED CELERY

Large, Smooth Prague—An improved form, producing large smooth roots, which are nearly round. Pkt., 5c; oz., 25c; ¼-lb., 75c.

With vegetables at such high prices why not plant more of a garden? What is your back yard worth to you?



White Plume

SWEET CORN

CULTURE—Corn should not be planted until the ground is warm, as the seed will rot in cold damp soil, or if planted too deep. Late April is early enough for the first plantings and for succession plant every two weeks through May and June. Cover the first planting very lightly, increasing the depth a little for the later plantings. For the Dwarf Early varieties, rows should be three feet apart; for later large varieties, four feet, and the hills two to three feet in the rows.

Sweet or Sugar varieties are used both for table and stock feeding, some of the large later sorts being preferred for silos and fodder.

Field Varieties are grown for fodder and for ensilage in the Pacific Northwest more than for grain, but of recent years improved early varieties have given good results and splendid crops are reported from many sections where it was thought corn could not be grown.

White Cob Cory—An improvement on the Red Cobbed Cory, as well as being equally early. The ears are larger, and it has the further advantage of having both a white cob and white grain. A splendid market garden variety, and excellent for the table. Pkt., 10c; 1b., 30c; 10 lbs., \$2.50.

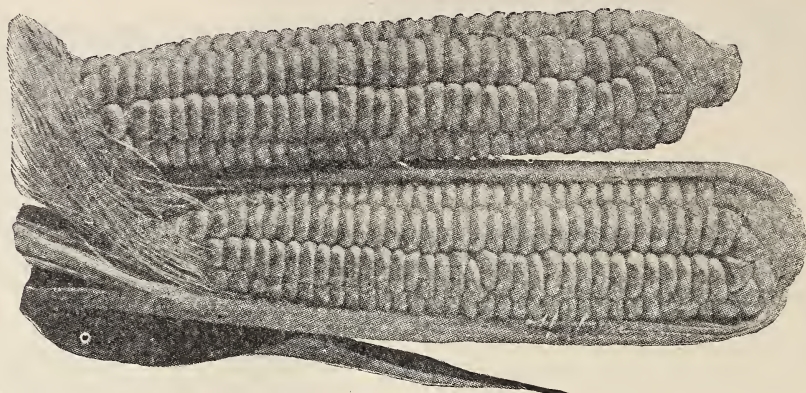
Early White Cory, Mammoth—The stalks are no larger than those of the White Cob Cory, but each stalk furnishes two or more large, fine-shaped ears, which are fit for use before those of most other sorts. The ears are 12-rowed, very symmetrical and handsome. The grain is large, broad, very white, and of remarkably good quality. Pkt., 10c; 1b., 30c; 10 lbs., \$2.50.

Early Evergreen—An improvement on Stowell's similar in appearance and general character, but a week or ten days earlier, and remaining fit for use somewhat later than that well-known sort; equal to Stowell's in all other respects. Pkt., 10c; 1b., 30c; 10 lbs., \$2.50.

(Corn continued next page)

We Pay Postage on All Seeds Bought by Package, Ounce or Quarter-Pound

SWEET CORN—Continued



GOLDEN BANTAM

GOLDEN BANTAM—It is the sweetest and most deliciously flavored sweet corn that has been grown, and has no equal for the home garden or early market. In flavor it is equaled by none.

The ears are short, thick, and compactly filled with large, plump, creamy-yellow kernels, which become golden-yellow as they ripen. The stalks are of dwarf habit, sturdy and very productive. It is one of the hardiest varieties, may be planted early, and is especially adapted to the Northwest. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

Black Mexican—This sweet corn, when young, cooks remarkably white, but the ripe grain is black. It is an excellent late variety. The stalks grow about six feet high, and the ears about eight inches long. The kernels are tender, sweet and delicious. **Pkt., 10c; 1 lb., 30c; 10 lbs., \$2.50.**

Peep-o'-Day—One of the earliest; very sweet and of delicate flavor. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

Early Minnesota—This old and deservedly popular variety is one of the best early sorts for the market and private garden. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

Country Gentleman—Valued for its richness of flavor and productiveness, having 3 to 4 good ears to the stalk, all extra large, with exceedingly deep kernels. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

Stowell's Evergreen—Remarkable for remaining a long time in a fresh condition, suitable for the table. Hardy and productive, tender and sugary, and the best late variety for general use.—**Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

Add Postage on Above if Wanted by Mail.

FIELD CORN

Pride of the North, or Yellow Dent—Recommended after repeated tests by the Agricultural College, as the best for Washington, Eastern Oregon and Idaho. A quick growing dent variety, thriving well where the Summers are not very long. Bright golden color. **Lb., 15c; 10 lbs., \$1.00.**

Wisconsin White Dent—Wisconsin White Dent is a large, handsome White Dent, extremely early and matures perfectly, and is the best White Dent Corn for Washington and Oregon. **Lb., 15c; 10 lbs \$1.00.**

Write for Prices on Larger Quantities.

Minnesota No. 13, Yellow Dent—A variety of great promise, being the earliest of the yellow dent corns and reported to be the heaviest yielding. Producing splendid large ears, closely filled from end to end with bright yellow kernels. Has rather a thick cob and the shelled grains have a tendency to irregularity. **Minnesota No. 13** will average 7 feet high and being a rapid, vigorous grower, with heavy foliage, makes a fine fodder corn. Will mature in 90 days under favorable conditions. **Lb., 15c; 10 lbs., \$1.00.**

MINNESOTA KING (DENT)

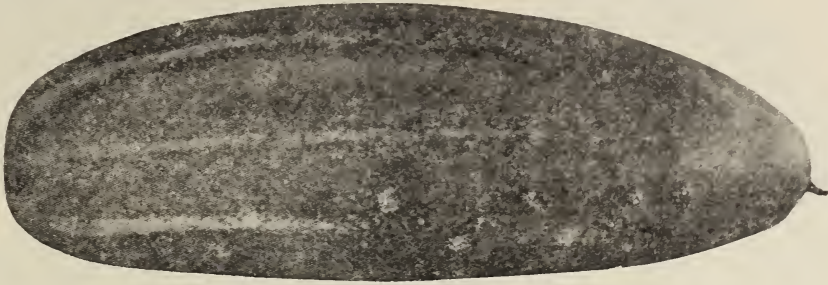
Smallest cob and largest grain. The ears are uniformly well filled out. Golden yellow and a good yielder, being a safe corn to plant west of the Cascades. **1 lb., 15c; 10 lbs., \$1.00.**

The Acme Automatic one-hand Corn Planter Put the right number of kernels just where you want them and the proper depth. Works equally well with right or left hand.

For Corn Planters and Corn Knives See Page 71.

CUCUMBERS

CULTURE—Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills four feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, whether required for use or not, as their ripening soon destroys the vine's usefulness.



Noroton Selected White Spine Cucumber

White Spine, Noroton Selected—A selection of improved White Spine. Earlier, more perfect in shape and more prolific; best slicing variety; splendid either for home garden or market. Pkt., 5c; oz., 15c; ¼-lb., 50c; lb., \$1.50.

Boston Pickling—A distinct variety, very popular for pickles; color bright green, a great producer and of excellent quality. It is for producing medium-sized pickles that this variety is so highly esteemed. If the fruits are gathered as soon as large enough, the vines will continue bearing through a long season. Pkt., 5c; oz., 15c; ¼-lb., 50c; lb., \$1.50.

Japanese Climbing—Often used for ornamental purposes, as the vines are very vigorous, throwing out tendrills, enabling them to climb trellises admirably. Dark green fruit, quite large and very tender. Pkt., 5c; oz., 20c; ¼-lb., 60c.

Cool and Crisp—Extra early and very prolific; long, straight, slender and very dark green; good either for pickling or slicing. Pkt., 5c; oz., 20c; ¼-lb., 50c.

Try our Vegetable Fertilizer on your Cucumbers, it gives the best of results.

Improved Long Green—The leading large variety. Fruit from 10 to 12 inches long, dark green, crisp and tender. A good variety for slicing, and when ripe they are the best for sweet pickles. We offer "Highest Quality" seed that will grow long and uniform fruit. Pkt., 5c; oz., 15c; ¼-lb., 50c; lb., \$1.50.

Arlington White Spine—One of the best sorts for table use. Vines vigorous, fruiting early and abundantly. Fruit uniformly straight, light, bright green in color, with a few white spines. Flesh crisp, tender and of excellent quality. Pkt., 5c; oz., 15c; ¼-lb., 50c; lb., \$1.50.

Early Green Cluster—One of the extra early varieties. A great bearer; fruit small, dark green and borne in clusters of excellent quality. Pkt., 5c; oz., 15c; ¼-lb., 50c; lb., \$1.50.

Davis Perfect—Fine for forcing or for outdoors. The fruit is long and straight, and being a comparatively shy seeder, is very valuable for slicing. Pkt., 5c; oz., 15c; ¼-lb., 50c; lb., \$1.50.

Small Gherkin—Very small bur; used for pickles. Pkt., 5c; oz., 25c; ¼-lb., 75c.

ENDIVE

CULTURE—This is a hardy vegetable, cultivated principally for a Winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.

Green Curled—Standard sort for Fall and Winter. Pkt. 5c; oz., 15c; ¼-lb., 50c.

Broad Leaved Batavian (Escarolle)—Has broad, thick leaves, which form a large, loose head. Pkt., 5c; oz., 15c; ¼-lb., 50c.

White Curled—A beautiful variety, with curled, mossy leaves, for early use. Pkt., 5c; oz., 15c; ¼-lb., 50c.

EGGPLANT

NEW YORK IMPROVED SPINELESS—Considered the best variety. Oval shaped, deep purple, large size and fine flavor. Pkt., 5c; ½-oz., 40c; oz., 75c.

QUALITY WILL ALWAYS BE FOUND IN POOLE'S SEEDS

KALE, OR BORECOLE

A specie of Cabbage, forming a mass of leaves. The leaves are cooked as greens. Should be planted late, as the cold weather improves it. It is hardy and will withstand cold weather.

Tall Green Curled Scotch—Heads are formed on stalks two and a half feet high. Color bright green and leaves are exceedingly curly. **Pkt., 5c; oz., 20c; ¼-lb., 60c; lb., \$1.75.**

Dwarf Green Curled Scotch—Noted for its extreme hardiness, dwarf, compact habit and extra fine curled leaves. **Pkt., 5c; oz., 20c; ¼-lb., 60c; lb., \$1.75.**

Thousand Head Kale—Is almost indispensable as a green feed for stock and poultry through the winter. The plants are hardy and thrifty, producing a heavy tonnage per acre and may be left in the field until wanted for feed. It is an ideal feed for dairy cows. Quarter-pound will produce sufficient plants for one acre. **Pkt., 5c; oz., 10c; ¼-lb., 30c; lb. 90c.**



KOHL RABI

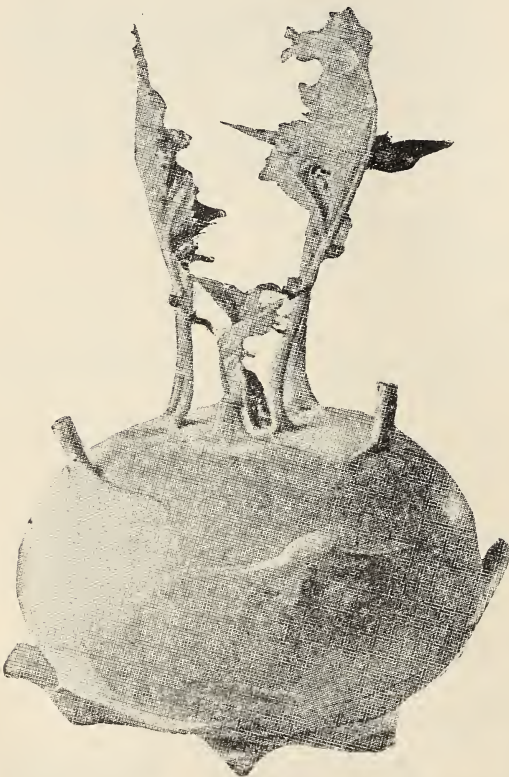
Hardy and of easy culture. Grown from plants the same as cabbage. The Kohl Rabi is a vegetable intermediate between the cabbage and turnip and combines the flavor of both. The edible part is a turnip-shaped bulb formed by the swelling of the stem. Kohl Rabi is far superior to cabbage or turnips in the delicacy of its flavor, and is a splendid addition to every garden. It should be eaten before growth ceases.

Early White Vienna—Very early; bulb white; best table variety. **Pkt., 5c; oz., 25c; ¼-lb., 75c.**

LEEK

The Leek belongs to the Onion family. Prized for soups. Cultivation similar to that of Onions, but should be hilled up about the neck to blanch it.

Large Rouen, or American Flag—A large favorite American sort. **Pkt., 5c; oz., 35c; ¼-lb., \$1.15.**



The cost of the very Best Seeds is so small, compared with the value of the resulting crops, that sensible planters know they cannot afford to risk seeds of doubtful pedigree—and we know just as well that we cannot afford to risk our hard-earned reputation by selling stock of uncertain character.

LETTUCE

Lettuce is so extensively grown that cultural directions seem unnecessary, but we offer a few simple suggestions that may save a later disappointment, as any failure is generally blamed to the seed. This should not be, as Lettuce, like many other vegetables, requires very rich soil, plenty of water, a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the Spring, and the weather turns dry and hot, they will run to seed without heading. The same seed sown in the Fall or with cooler weather would develop perfectly. At a temperature of 40 degrees or lower lettuce will not thrive. At 65 degrees and upward it has a tendency to run up and not head properly. For outside plantings sow the seed in shallow drills from one to two ounces to the 100 yards.

An ounce will produce 3,000 plants. Four pounds should plant an acre.

Lettuce matures in forty to sixty days from time of planting.

GRAND RAPIDS

For Early Forcing—As a Lettuce for green house forcing this variety undoubtedly stands at the head of the list.

quick growth, and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, light yellowish green leaves, slightly crimped and blistered, rather thin, good flavor, crisp and tender. It will stand shipping better than most curled sorts. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

Hanson—Grows to large size, and is uniformly sure heading. Heads very solid and beautifully blanched; crisp, mild and tender. One of the finest varieties to grow for market during the summer months. Our stock is unexcelled. **Pkt., 5c; oz., 15c; ¼-lb. 45c; lb., \$1.50.**

New York, or Wonderful—This is the mammoth head lettuce so popular in California from whence it is shipped to the Northern markets, arriving in splendid condition. The immense heads are solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. The quality is unsurpassed, being tender, crisp and sweet. New York is a hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head. **Pkt., 5c; oz., 25c; ¼-lb., 75c; lb., \$2.50.**

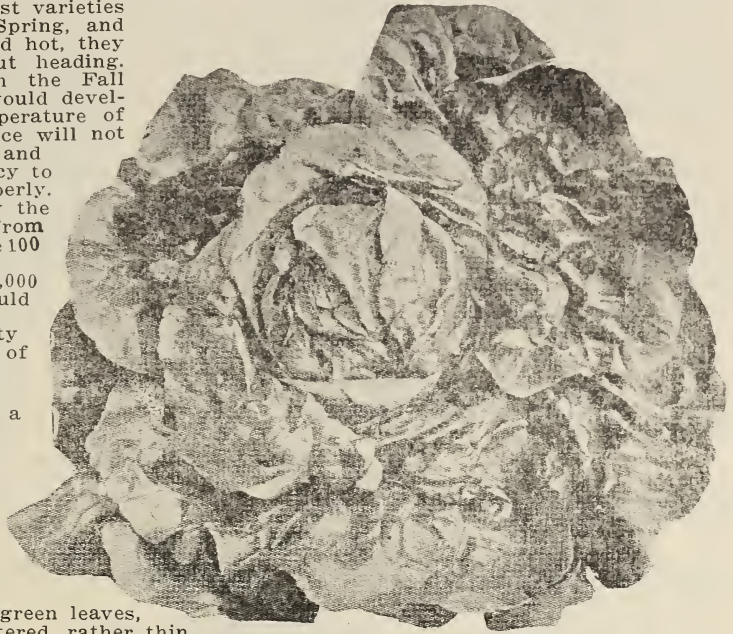
May King—A large growing, smooth leaved, richly flavored sort. Plant, light green, with round leaves, which form into a very solid, compact, round head; stands a long time without running to seed. Inner leaves blanch to a rich, golden yellow. Exceedingly rich, tender and buttery. Fine for open ground or forcing. For succession plant in Spring, then in August and again in September. **Pkt., 5c; oz., 20c; ¼-lb., 60c; lb., \$2.00.**

California Cream Butter—A fine large butter head lettuce of the richest flavor, tender, sweet and crisp; a great favorite in California, being a popular market variety, medium early. The heads are very broad, often measuring eight inches across and continue to grow for two or three weeks after they are ready to use, and are very slow to seed. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

ICEBERG

A beautiful lettuce. Large, curly leaves of bright, light green, with a very slight reddish tinge at the edges. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

We Pay Postage on All Garden Seeds Bought by the Packet, Ounce or Quarter-Pound



Big Boston—This is a fine forcing variety for cold frames during the winter months, as it produces heads of very large size in a cooler temperature than most forcing strains. Large heads are beautifully blanched and of superior quality. It heads well in the open ground during cool weather of spring and fall, and is very popular in the South to grow for shipping North. Our seed is an extra selected strain. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

Simpson's Early Curled—A leading market variety for very early planting and forcing. Forms a dense mass of finely curled and wrinkled leaves that are excellent and tender, and do not wilt readily. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

Black Seeded Simpson—Forms a close compact mass of curly leaves of a yellowish green. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

Early Prize Head—Standard sort; one of the best thin leaved, clustering, varieties. The very large leaves are savoyed or crimped, bright green, tinged with red, and are exceedingly tender, crisp and sweet, forming a large, loose head. One of the best for the garden, but not good to ship long distances. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

BROWN DUTCH

Forms a large, solid head, sweet, tender and of good flavor. Outer leaves are tinged with brown. Very hardy. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

WHITE PARIS COS OR ROMAINE

A distinct variety, forming oblong, upright heads, largest near the top. It is hardy, tender and crisp, and does not run to seed as quickly as some other Cos varieties. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

MUSTARD

The leaves of mustard make excellent greens of sharp, pungent flavor, and are cooked the same as spinach or beet leaves.

SOUTHERN GIANT CURLED

Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges; hardy, vigorous, highly recommended. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

WHITE ENGLISH

Light green variety; tender leaves; seed light yellow. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

BLACK

These seeds form the mustard of commerce. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

MUSHROOM SPAWN

LAMBERT'S PURE CULTURE SPAWN

Mushrooms may be grown in any place where conditions of temperature and moisture are favorable. A shed, cellar or cave may be utilized to advantage for this purpose. It is essential that the temperature be maintained from 53 to 60 degrees F., and that the moisture be properly regulated. Lambert's Pure Culture Spawn is far superior to the old-style varieties, and much better results can be obtained from its use. The bricks should be broken into pieces about two inches square and planted from 10 inches to a foot apart. Bricks weigh from 18 to 24 ounces. A brick will spawn 10 square feet of bed. With Lambert's Pure Culture Spawn it is impossible to raise poisonous mushrooms. Price, per brick, 40c.

MUSKMELON

OSAGE, OR MILLER'S CREAM

One of the finest flavored melons in cultivation, and highly recommended. The flesh is of a rich salmon color, very sweet and melting in quality. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

ROCKY FORD OR NETTED GEM

The most popular and best seller among Muskmelons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet and highly flavored. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

BURRELL'S GEM

A very popular variety in this locality. The skin is rather dark green; the rind is thin and flesh very thick, salmon colored, of a most delicious, juicy flavor. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

WATERMELONS

SWEET HEART

Good shipper. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and very light green; rind thin, but firm; flesh bright red, firm, solid, but very tender, melting and sweet. Fruit retains its good quality for a long time after ripening. Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.25.

HUNGARIAN HONEY

A very early sort; fine for northern latitudes; perfectly round; brilliant red flesh. Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.25.

OKRA OR GUMBO

DWARF GREEN PROLIFIC

Short, thick pods. Pkt., 5c; oz., 10c; ¼-lb., 30c.

LONG GREEN

Tall; very productive; moderately long green pods. Pkt., 5c; oz., 15c; ¼-lb., 45c.

ONIONS

YELLOW GLOBE DANVERS

A very handsome, round or globe-shaped variety of large size, with thin, yellowish skin, white flesh. Fine grained, mild, very firm, and the best of keepers. It ripens early. Pkt., 5c; oz., 25c; ¼-lb., 80c; lb., \$2.50.

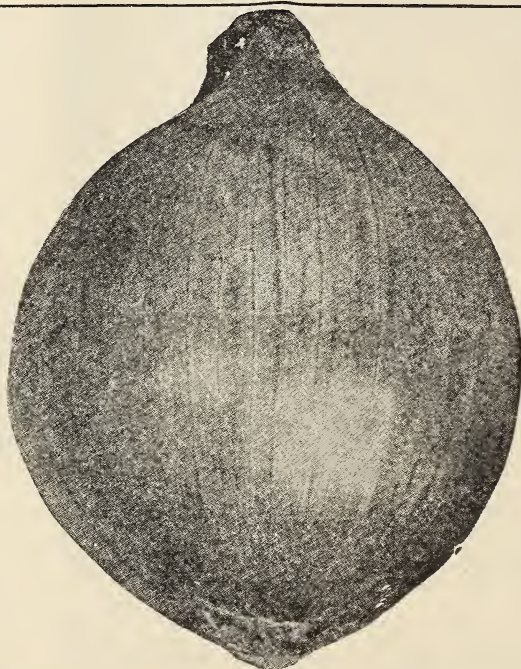
FLAT YELLOW DANVERS

Same as Globe Danvers, except in shape. Pkt., 5c; oz., 20c; ¼-lb., 60c; lb., \$2.00.

PRIZETAKER, THE GENUINE

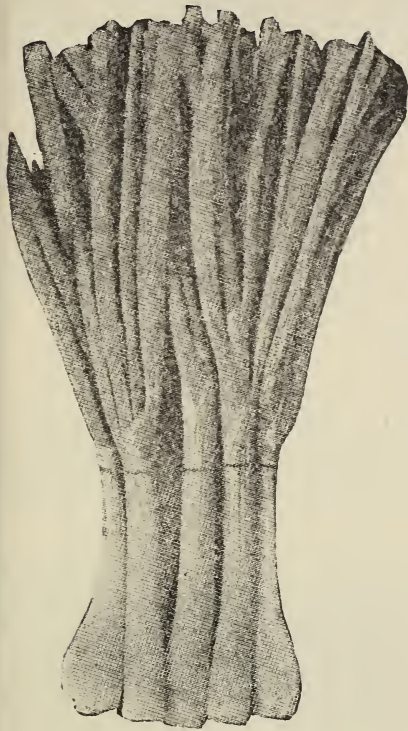
Of fine flavor, handsome shape and enormous size. A perfect globe shape, with a bright straw-colored skin; the necks are very small and the onions always ripen up hard. Pkt., 5c; oz., 25c; ¼-lb., 80c; lb., \$2.50.

(Onions Continued Next Page.)



A Planet Jr. Seeder will soon save enough seed to pay for itself; gives a better stand makes cultivation easy, saves time and money. See page 72.

ONIONS—Continued



WHITE QUEEN

Bottom Onion Sets, yellow, lb., 15c.
Bottom Multiplier Onion Sets, lb., 15c.

Onions have been aptly termed the "money crop" of the garden—our strains are dependable and true to type.

One ounce will sow 100 feet of drill.

Sow in spring as soon as the ground can be worked, in drills one foot apart. Thin to 3 or 4 inches and cultivate frequently with rake and hoe to keep down the weeds. They grow best in rich, sandy soil.

EARLY WHITE QUEEN

If sown thickly, produces small, very firm bulbs, the best of all for pickling, and is especially useful to market gardeners for producing an attractive "green onion." If given more room, matures an excellent onion, that will keep all Winter. **Pkt., 5c; oz., 40c; ¼-lb., \$1.25; lb., \$4.00.**

WHITE PORTUGAL, OR SILVER SKIN

This variety is one of the leading white sorts, and is of beautiful shape and very mild flavor. The bulbs are flat in shape and mature early. It is a splendid variety for both family use and the market gardener, and also for its good keeping qualities. **Pkt., 5c; oz., 30c; ¼-lb., 90c; lb., \$3.00.**

WHITE GLOBE

Yields abundantly and, as a table variety, its clear white color is exceptionally attractive. **Pkt., 5c; oz., 35c; ¼-lb., \$1.00; lb., \$3.50.**

WHITE BARLETTA

A small, pure white, mild onion; fine for pickles. **Pkt., 5c; oz., 35c; ¼-lb., \$1.00; lb., \$3.50.**

Australian Brown—This onion resembles the Oregon Yellow Danvers in general appearance, but has a clear, amber-brown skin that attracts buyers. It matures early, ripens uniformly, and will keep in good condition longer than any other onion. We offer the true seed. **Pkt., 5c; oz., 20c; ¼-lb., 55c; lb., \$1.75.**

Large Red Wethersfield—A standard variety; one of the most productive kinds, even in poor soil. Its good keeping qualities render it one of the best for shipping. **Pkt., 5c; oz., 25c; ¼-lb., 75c; lb., \$2.50.**

PARSLEY

Parsley is very generally used for garnishing, and seasoning soups and stews. It can be used fresh from the garden, or dried and rubbed into a fine powder when it can be bottled for Winter use. It becomes finer and more beautifully curled if cut frequently. As the seed germinates slowly, it should be soaked a few hours in warm water, and sown in drills a foot apart and half an inch deep, as early in Spring as possible. Thin to three or four inches apart. Thrives best in deep, rich soil.

Fine Triple Curled—Fine for seasoning; also good for table decoration. **Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.**

Turnip-Rooted, or Hamburg—The root, which resembles a small turnip, is the edible portion of this variety. Extensively grown and used for flavoring soups, etc. **Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.**

PEPPER

Sow the seeds early in hotbeds, or later, when the weather becomes warm, in open beds; when two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the row. Guano and hen manure are excellent fertilizers, and will greatly increase the yield.

Large Bell or Bull Nose—A large, mild, thick-fleshed variety. One of the best for stuffed pickles. **Pkt., 10c; oz., 70c.**

Long Red Cayenne—Brilliant, coral-red pods, three or four inches long, and a prolific bearer. Very pungent, and used very largely with pickles when green. **Pkt., 10c; oz., 70c.**

Sweet Spanish or Mountain—Similar to the Large Bell, but usually larger. Excellent for pickling and stuffing. **Pkt., 10c; oz., 60c.**

PARSNIPS



Hollow Crown or Long White—Root very long, white, smooth, tender, sugary, and of most excellent flavor. Very hardy; will keep through the Winter without protection. Pkt., 5c; oz., 25c; $\frac{1}{4}$ -lb., 75c; lb., \$2.50.

The Parsnip is nutritious and wholesome, with a sugary sweetness peculiar to itself, and is desirable both for the table and stock feeding. It yields a large crop, and is said to be more valuable for dairy cows than either the carrot or turnip. As the seed germinates very slowly, sow as early in Spring as possible, in drills fifteen inches apart on deeply cultivated, rich, loamy soil. Keep clear of weeds and thin to three or four inches apart. The roots of the parsnip are improved by freezing.

Guernsey, Half Long—Root white, very tender, with a smooth, clear skin. Shorter and thicker than "Hollow Crown," desirable for stiff soils. Pkt., 5c; oz., 25c; $\frac{1}{4}$ -lb., 75c; lb., \$2.50.

GARDEN PEAS

When ordering Peas to be forwarded by mail add postage.

CULTURE—Peas can be grown in every garden, but for the earliest varieties a light, warm, moderately rich soil is most suitable. The smooth kinds can be sown as soon as the ground can be worked, but the wrinkled varieties should not be planted till it is warmer, or they will rot. Sow in single or double rows from $1\frac{1}{2}$ to 3 feet apart, dropping a pea every inch and covering from 2 to 3 inches deep. For a succession sow every ten days up to July. Sow one quart to 50 feet drilled; $1\frac{1}{2}$ to 2 bushels to an acre.



EARLY PEAS

ALASKA, OR EARLIEST OF ALL—By careful selection and growing we have developed a stock of this smooth blue pea of unequalled evenness in growth of vine and early maturity of pods which are filled with medium sized, bright green peas of good flavor. Vines two and one-half to three feet high. Seed small, and bluish-green in color. Matures all the crop at once and is an invaluable variety for market gardeners and canners. Pkt., 10c; lb., 25c; 10 lbs., \$2.25.

AMERICAN WONDER—The earliest of the dwarf, wrinkled varieties, vines branching, about ten inches high and covered with well filled pods of medium size, containing five to eight large, exceedingly sweet, tender and well flavored peas. A great favorite for planting in the small garden on account of its short, compact growth. We have taken great pains in growing our stock and know it to be much better than that usually sold. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

McLEAN'S LITTLE GEM—The vines are of dwarf growth and produce an abundance of round well filled pods of good size, about three inches long, only a few days after the American Wonder. The peas are green, wrinkled, of sweet, delicious flavor and excellent quality. One of the best for family use. It remains fit for use longer than the American Wonder and Nott's Excelsior, and thought by many to be sweeter. Height, 15 to 18 inches. Pkt., 10c; lb., 30c; 10 lbs., \$2.50.

EARLY GARDEN PEAS—Continued

NOTT'S EXCELSIOR—A deservedly popular variety; an enormous yielder, and of the very choicest flavor; pods well filled with six to eight peas, packed very closely together; valued highly for the home garden, and for all-round excellence is second to none; 15 inches high. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

LITTLE MARVEL—A splendid new dwarf pea, for home or market. The dwarf, bushy vines averaging 15 inches are loaded with firm, square-ended pods $2\frac{1}{2}$ to 3 inches long, tightly filled with plump, luscious, deep green peas. Little Marvel is as early as American Wonder, fully equals the superb quality of Nott's Excelsior, and far outyields these two popular sorts. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

GRADUS—This extra early, wrinkled pea bears pods of large size and combines quality with earliness. It is very hardy; can be planted fully as early as the smooth peas; growth, vigorous and healthy; vines $2\frac{1}{2}$ feet in height; very prolific. The quality and flavor are delicious and the peas remain tender and sweet for a long time. **Pkt., 10; lb., 30c; 10 lbs., \$2.50.**

LAXATONIAN—A new, early, dwarf, robust, large podded pea of superior excellence; often referred to as "Dwarf Gradus," and is said to surpass Gradus in yield and quality, with the added advantage of dwarfed growth, averaging 16 inches. The large pods are well filled, holding 8 to 10 peas.

Laxtonian is so highly recommended that you should give it a trial. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

THOMAS LAXTON—A cross between Gradus and one of the extra-early sorts. Ripens within a day or two of the earliest round varieties; very productive. The pods are large and contain seven or eight large, wrinkled peas of the finest flavor. Height 3 feet. **Pkt., 10 lbs 30c., 10 lbs., \$2.50.**

BLUE BANTAM—Unequaled for extreme earliness, superb quality, and unusual productiveness. The dwarf vigorous vines average 15 inches in height and carry really enormous crops of large, deep bluish-green pods. The handsome pointed pods average 4 inches long and are tightly packed with extra large, deep bluish-green peas of most luscious flavor. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

MAIN CROP VARIETIES

STRATEGEM—A semi-dwarf variety with large leaves and large pods. The peas are dark green, wrinkled, and of good quality. It is planted in large quantities by gardeners for market. In quality it is unsurpassed, the peas when cooked being of the most delicious sweetness. Vines grow 18 inches to 2 feet high, and they are very stocky. **Pkt., 10c.; lb., 30c; 10 lbs., \$2.50.**

DWARF TELEPHONE—Of English origin and introduction. The striking features are its large pods and the way in which they are heaped up in ridges on the short, strong vines. The pods are nearly double the size of American Wonder or Little Gem, and are always well filled with large peas of most excellent quality. The vines are dwarf, strong and thrifty, making an ideal garden variety. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

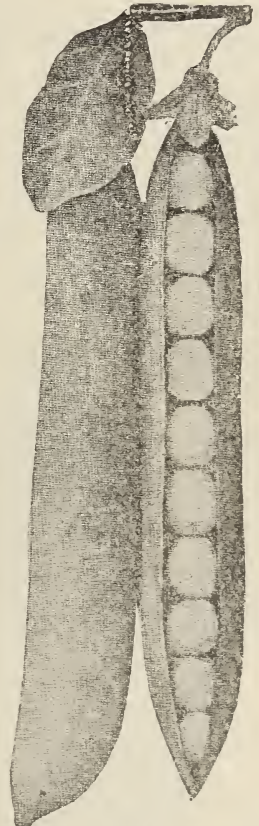
TALL TELEPHONE—This variety has now come into general use, and is acknowledged to be of great merit. It is immensely productive, of the finest quality and excellent, sugar flavor; vines strong, the pods are of large size, filled with large, luscious peas; height four feet. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

CHAMPION OF ENGLAND—A most popular and extremely productive pea, which has been valued for many years as the standard variety. Vines are of strong growth and very productive of large, well-filled pods. The flavor of the peas is delicious. Height, 5 feet. **Pkt., 10c; lb., 30c; 10 lbs., \$2.50.**

MAMMOTH MELTING SUGAR—Grows 4 feet tall, producing very large broad flattened pods. A great favorite with many. In the Edible-Podded or Sugar Peas the pods are gathered, broken and cooked like string beans when the peas start to develop in the pod or have reached about half their full size. **Can't Supply.**

There is a vast difference in "strains" of garden peas. You will find our stock "very superior," healthy, vigorous and true, much better than the average seed sold by dealers.

Write for special quotations on large quantities.



Strategem

Humogern for Garden Peas

increases the yield, enriches the soil.
Garden size 25c, $\frac{1}{4}$ Bu., size, 35c.

COMPLAINTS OR PRAISES—If you are well pleased with the goods and our manner of doing business, tell everyone. If you are not, tell us, so we can please you. Our best efforts will be put forth in filling all orders carefully and promptly in a way that will please you.

POTATOES

We aim to carry the very best potatoes obtainable and all the varieties below mentioned are especially adapted for this section of the country.

Prices on application.

American Wonder, Beauty of Hebron, Early Rose (selected), Netted Gem, Gold Coin, Burbank.

PUMPKIN

CULTURE—May be planted middle of Spring, in hills 8 or 10 feet apart each way, four seeds in a hill. In other respects is cultivated in same manner as cucumbers. Avoid planting near other vines. One pound seed will plant 300 hills.

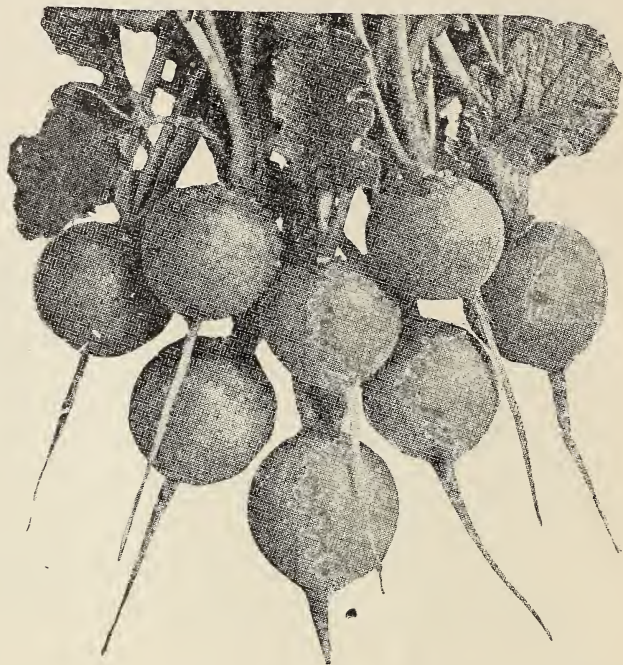
Sweet, or Sugar—A handsome and productive small pumpkin, ten to twelve inches in diameter; round flattened; skin, orange; flesh, deep yellow, fine grained and very sweet. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

Winter Luxury—The best flavored pie pumpkin grown; enormously productive; excellent keeper; medium size; color, golden-russet, finely netted; flesh, deep golden, sweet, tender and very thick; none better. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

Large Yellow, or Connecticut Field—Large, round; deep, glossy yellow. Vines vigorous and very productive; good keeper. Grown extensively for stock feeding. Pkt., 5c; oz., 10c; ¼-lb., 30c; lb., \$1.00.

Mammoth Tours—A productive French variety; grows to an enormous size. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

RADISH



CULTURE—Sow as soon as the ground is dry in the Spring, in rows 8 to 12 inches apart, every week or ten days for a succession, up to the middle of June, after which they are but little used, unless a cool northern spot can be had, where the ground is shaded during part of the day. They should be sown in light, rich soil, as a crisp Radish cannot be produced in heavy soils. Sow also in early fall for late crops and Winter use. Sow 8 to 10 lbs. to the acre. Radishes should be eaten quite small; it is a mistake to let them grow too long and too large. This applies particularly to the French Breakfast and small turnip-shaped sorts.

Early Scarlet Turnip (White Tipped)—An exceptionally fine strain so largely grown by market gardeners. Its color is of the deepest scarlet with a prominent white tip; superb flavor. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Early Scarlet Turnip—One of the standard sorts for general sowing. Roots are turnip shaped, dark red and of fine quality. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

French Breakfast—This well known radish is olive shaped, bright scarlet with the exception of the white tip. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Chartier—Roots are red with a white tip, slender, and remain solid and crisp until of large size. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Icele—One of the earliest and purest of all long, white varieties. For crispness and tenderness it is unsurpassed. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Lady Finger, or White Vienna—Of rapid growth and beautiful shape. Skin and flesh snow-white; very juicy, firm, crisp and tender; the finest of Long White Radishes. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

White Strasburg—One of the best large Summer sorts. It covers a long season, as it is good when quite small. The roots are long, very white, crisp and tender. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Early Long Scarlet, Short Top—This bright scarlet, small topped sort is uniformly straight, smooth, brittle and crisp, and is a standard and excellent sort for private gardens or market use. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Early Scarlet Turnip (Forcing)—Popular everywhere, either for forcing or outside sowing. Its brilliant color, uniform shapes, and crisp, white flesh make it a favorite with all. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

China Rose Winter—One of the best Fall and Winter varieties; a favorite with market gardeners; bright rose color; flesh white, firm and of superior quality. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Black Spanish Long—Standard Winter sort; has good flavor and keeps well. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

Black Spanish Round—Same as long, except shape. Pkt., 5c; oz., 10c; ¼-lb., 35c; lb., \$1.25.

RHUBARB OR PIE PLANT

CULTURE—Rhubarb succeeds best in deep, rich, somewhat retentive soil. The richer its condition and the deeper it is stirred the better. Sow in drills an inch deep and thin out the plants to six inches apart. In the Fall transplant the young plants into very highly manured and deeply stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure each Spring. The stalks should not be plucked until the second year and the plant never allowed to exhaust itself by running to seed.

Victoria, or Mammoth—Very large; finest cooking variety. Pkt., 5c; oz., 15c; ¼-lb., 50c; lb., \$1.50.

SALSIFY—Oyster Plant

The roots are long and tapering; when cooked has a flavor like oysters. If more people knew how many fine dishes are made out of Salsify Roots it would be much more extensively planted. Same culture as carrots. Roots good all Winter.

Mammoth Sandwich Island—The best variety of Salsify, being very smooth, of fine quality, pure white and extra large size. Pkt., 5c; oz., 20c; ¼-lb., 60c; lb., \$2.00.

Our Business is builded not for the present only, but with an outlook to the future. A business that has no vision of the future, or the object of which is mere money-making, would not be worthy a life's work.

POOLE'S SEED & IMPLEMENT CO.

SPINACH

CULTURE—Sow in early Spring, in drills a foot apart (10 to 12 lbs. to the acre) every two weeks for a succession, and, as it grows thin out for use. For Fall use, sow in August, and for Winter crop in September. Cover that which is left out over Winter with straw or leaves after the weather becomes quite cold. Keep clear of weeds.

Long - Standing (Round Thick-Leaved)—Dark Green; leaves large and thick; very long-standing. Best for Spring growing. Oz., 10c; ¼-lb., 25c; lb., 75c.

Victoria—Extra-dark, black-green color. Two or three weeks later than the ordinary "Long-standing." A fine variety for Spring sowing. Oz., 10c; ¼-lb., 25c; lb., 75c.

Round Viroflay (Thick-leaved)—Has very large, thick, dark green leaves; the favorite market-gardeners' sort for Fall or Spring sowing. Oz., 10c; ¼-lb., 25c; lb., 75c.

Prickly, or Winter—Vigorous and hardy; recommended for Fall sowing. Oz., 10c; ¼-lb., 25c; lb., 75c.

**Our DIAMOND QUALITY
Fertilize Your Garden with
VEGETABLE FERTILIZER**

We Pay Postage on All Garden Seeds Bought by the Packet, Ounce or Quarter-Pound

SQUASH

CULTURE—Sow in hills in the same manner and at the same time as cucumbers, and bush varieties 3 to 4 feet apart, the running kinds from 6 to 9 feet apart.

Early White Bush Scallop—The best summer sort for the market; very productive and of good size. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

English Vegetable Marrow—Oblong, dull, yellow skin, very prolific and of finest table quality. Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.

True Hubbard—The best seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Keeps perfectly through the winter. Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.

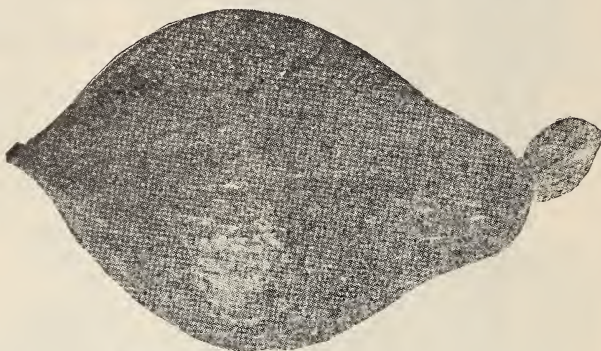
Golden Hubbard—The same in size, shape and quality as the well-known Hubbard Squash, except that it is a bright red or golden color, and somewhat earlier. It is also a long keeper. One of the very best fall and winter sorts yet introduced. Maturing before the frosts; is vigorous and wonderfully productive. Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.

Mammoth Chili—The largest of all Squashes, growing to an enormous size, often weighing over 200 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.

Essex Hybrid—A good fall and winter sort; fine-grained; rich flavor; very prolific. Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.

Early Yellow Bush Scallop—An early, flat, scallop-shaped variety; color, yellow; flesh, pale yellow and well flavored; very productive. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

Mammoth Summer Crookneck—Early, prolific, solid, curved neck; skin yellow, thin, hard and warty; flesh tender and of good quality. Twice as large as the ordinary Crookneck and several days earlier. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.



TRUE HUBBARD

Boston Marrow—Skin yellowish, very thin; flesh dry and fine grained; of unsurpassed flavor. Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.

SUNFLOWER

Every farmer and poultry raiser should raise sunflowers, for the seed is very fattening and contains a high percentage of protein, an excellent egg food.

Mammoth Russian—The largest and best for seed. Large pkt., 5c; ¼-lb., 10c; lb., 25c.

Look to Us for Your
GARDEN AND FARM IMPLEMENTS

TOBACCO

Sow the seed thinly in beds, as early as they can be well prepared. Cultivate thoroughly, transplanting when six inches high to rows four feet apart each way.

Connecticut Seed Leaf—Hardy, and the best adapted to cool localities, and for general use. Pkt., 10c; oz., 75c.

Havana—Of fine texture and delicate flavor. Pkt., 10c; oz., 75c.

TOMATOES

CULTURE—Sow in a hotbed in early spring, or the seed may be sown in shallow boxes and placed in a window when one does not wish to have the trouble of making a hotbed. Transplant to the open ground when all danger of frost is past, setting the plants 3 to 4 feet apart each way. Fruit may be used several weeks earlier by sowing seed quite early and transplanting to small pots. Tomatoes that have not ripened at the end of the season may be taken from the vines and placed in empty cold frames, or wrapped in tissue paper, and carefully packed in flat boxes—where a large proportion of them will ripen from time to time, frequently until Christmas.

Spark's Earliana—The earliest tall variety, forming ripe fruit much earlier than any other variety. The fruit is large, smooth, of a bright scarlet color and of fine quality. Very valuable for early market use. Pkt., 5c; oz., 40c; ¼-lb., \$1.25.

Atlantic Prize, Extra Early—A distinctly early variety, of good size and smooth surface. Many of the objections to the usual early kinds, such as under size, deep corrugations, and rough skin, are overcome in the Atlantic Prize. Pkt., 5c; oz., 40c; ¼-lb., \$1.25.

Tomatoes continued next page

DON'T practice false economy by buying low-priced seeds. Our Motto—Quality First
Price as Low as We Can Make It

TOMATOES—Continued

Chalk's Early Jewel—Large, bright red, smooth, round fruits, very deep and colored evenly up to the stem; very solid, almost seedless and of the finest flavor.

Vines are vigorous, not subject to blight, and yield fully equal to, or better than, Earliana. Pkt., 5c; oz., 40c; $\frac{1}{4}$ -lb., \$1.25.

Acme—Also early and popular. The fruit is smooth, handsome, solid and of good quality. A good bearer. Color dark purplish red. A superior early market variety, and ripens evenly. Pkt., 5c; oz., 40c; $\frac{1}{4}$ -lb., \$1.25.

Stone—A large tomato of good quality; round or apple shaped, and very uniform, deep red in color, and exceedingly heavy. Pkt., 5c; oz., 40c; $\frac{1}{4}$ -lb., \$1.25.

Dwarf Champion or Tree Tomato—Vines erect and vigorous; fruit of medium size, round, smooth, of excellent quality, very fleshy; approaching purple in color. Pkt., 5c; oz., 40c; $\frac{1}{4}$ -lb., \$1.25.

Red Cherry—Small fruits, used for pickles; very handsome. Pkt., 5c; oz., 50c.

Ground Cherry, or Husk Tomato—Grows to great perfection under ordinary culture, yielding abundantly; very much prized for preserving; should be in every garden. Pkt., 10c; oz., 75c.



CHALK'S EARLY JEWEL

Yellow Plum—Round and regular; bright yellow; used for pickles. Pkt., 10c; oz., 75c.

TURNIPS

CULTURE—Turnips do best in highly enriched light sandy or gravelly soil, commence sowing the earliest varieties in April in drills from 12 to 15 inches apart, and thin out early six or nine inches in rows. For a succession sow at intervals of a fortnight until the last week in July, from which time until the end of August sowing may be made for the fall and main crop. One ounce will sow 150 feet of drill; two to three pounds to the acre.

For feeding stock in the fall or winter there is nothing superior to turnips and rutabagas, as they are much liked by all kinds of stock and serve to keep them in good condition. We cannot too earnestly recommend farmers to increase their sowings largely, for we are sure the crop will prove remunerative.

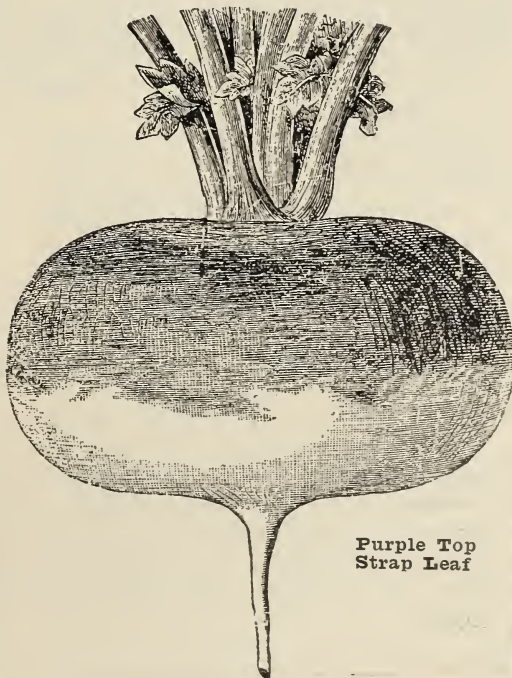
Early Purple Top Milan—This variety is ready for the table sooner after planting than any other yet introduced. Top small, erect, strap-leaved; bulb a deep purple above, white underneath; flesh white, firm and delicate. Pkt., 5c; oz., 20c; $\frac{1}{4}$ -lb., 60c; lb., \$1.75.

Early White Milan—Same as Purple Top Milan, but pure white, sweet and tender; best early market variety. Pkt., 5c; oz., 20c; $\frac{1}{4}$ -lb., 60c; lb., \$1.75.

Early White Flat Dutch—One of the very best and most universally grown. Small, erect top, round, flat; flesh, white, firm, but very tender and sweet. Of quick growth, it is soon ready for the table and keeps well. Pkt., 5c; oz., 15c; $\frac{1}{4}$ -lb., 35c; lb., \$1.00.

Golden Ball—Undoubtedly one of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners. Pkt., 5c; oz., 15c; $\frac{1}{4}$ -lb., 35c; lb., \$1.00.

Purple Top Strap Leaf—A leading white-fleshed variety, and one of the best, either for the family, market garden or field crop. It is medium size, and produces a large crop. The flesh is firm, but tender, and of a superior rich buttery flavor. A good keeper. Pkt., 5c; oz., 15c; $\frac{1}{4}$ -lb., 35c; lb., \$1.00.



Purple Top
Strap Leaf

TURNIPS—Continued

Pomeranian White Globe—One of the most productive kinds and in good, rich soil, roots will frequently grow to 12 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth. **Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.**

Cowhorn—Sometimes called Long White. Slightly crooked. Pure white except a little shade of green at the top. Grows half out of the ground and is of very rapid growth. It is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Wash., as it is an immense yielder. **Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.**

Yellow Aberdeen—Round, medium size; light yellow. Produces a large crop; is hardy and keeps well; flesh very firm but tender and sweet. A great favorite with

the dairymen. **Pkt., 5c; oz., 15c; ¼-lb., 45c; lb., \$1.50.**

White Egg—Is perfectly smooth, of a pure, clear white, growing half out of the ground, and at times to the size of a rutabaga, being a very choice kind for table use; of excellent flavor, sweet and mild. Pulls clean from the ground; thin, snow-white skin. **Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.**

Early Snowball—Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp, solid and of fine flavor. **Pkt., 5c; oz., 15c; ¼-lb., 40c; lb., \$1.25.**

Purple Top White Globe—A large, globe-shaped variety; purple above the ground; it is handsome and of excellent quality, and recommended both for the family garden and field crop. **Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.**

RUTABAGA

Improved American Purple Top—The leading standard variety, being very distinct in type, attaining a wonderfully large size; immense yielder. The flesh is very firm, superior in every way, valuable alike for all purposes. **Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.**

White Sweet Russian—This variety is most excellent, either for table or stock; it grows to a very large size; flesh white; solid, of a firm texture, sweet and rich; an excellent keeper. **Pkt., 5c; oz., 15c; ¼-lb., 35c; lb., \$1.00.**

HERB SEEDS

Anise—Seeds aromatic and carminative. **Pkt., 5c; oz., 50c.**

Balm—For culinary purposes. **Pkt., 5c; oz., 35c.**

Basil—For flavoring soups. **Pkt., 5c; oz., 50c.**

Borage—Leaves used as a salad. **Pkt., 5c; oz., 35c.**

Caraway—For sowing. Used in flavoring bread and liquors. **Pkt., 5c; oz., 50c.**

Catnip—Has medicinal qualities. **Pkt., 10c; oz., \$1.40.**

Coriander—Seeds aromatic. For sowing. **Pkt., 5c; oz., 20c.**

Dill—For sowing. Seeds used for flavoring vinegar. **Pkt., 5c; oz., 20c; ¼-lb., 60c.**

Fennel, Sweet—Seeds aromatic; for flavoring. **Pkt., 5c; oz., 20c.**

Horehound—has medicinal qualities. **Pkt., 5c; oz., 35c.**

Lavender—True. For oil and distilled water. **Pkt., 10c; oz., 70c.**

Marjoram, Sweet—Is used in seasoning. **Pkt., 15c; oz., \$1.50.**

Mint—Curled Mint. **Pkt., 25c.**

Rosemary—Yields an aromatic oil and water. **Pkt., 10c; oz., 75c.**

Rue—Said to have medicinal qualities. **Pkt., 10c.**

Sage, Broad-Leaf—A culinary herb; also used in medicine. **Pkt., 10c; oz., \$1.25.**

Savory, Summer—Is used as a culinary herb. **Pkt., 10c; oz., 65c.**

Tansy—Generally used in bitters. **Pkt., 10c.**

Thyme, French—Is used as a seasoning. **Pkt., 10c; oz., \$1.00.**

Wormwood—Has medicinal qualities. **Pkt., 10c; oz., 65c.**

We carry only high grade, tested seeds, and our stock is as complete as any stock in the Northwest. We have sold seeds in Tacoma for thirty years and we have always made it our business to buy and sell the best only. While there are cheaper seeds on the market, it does not pay to experiment. QUALITY with us is always first and price as low as we can make it. We sell to practically all the leading gardeners in this territory. If it pays for the market gardener to buy the best, why not you? ALL SEEDS ARE TESTED BY US BEFORE THEY ARE SOLD.

CLOVER AND ALFALFA SEEDS

Write for prices on larger quantities. They are always subject to market changes.
When ordering, to go by Mail, add Postage

ALFALFA OR LUCERNE

Requires deep, rich, well-drained soil. The taproot descends often to a depth of 10 to 15 feet in loose soil. It is, consequently, capable of resisting great droughts. It should be sown alone (about same time as oats in this section) in thoroughly prepared, deeply plowed soil, at the rate of 20 to 25 pounds to the acre. Per lb., 31c. Write for prices in quantities.

ALSIKE OR SWEDISH CLOVER

(Trifolium Hybridum.)

A perfectly hardy perennial variety which is rapidly growing in popular favor. Excellent for hay and pasture. Valuable for bees. Resists both drought and excessive moisture. The hay of this variety is greatly preferred by some to that of Red Clover, for the reason that it is generally finer, brighter and not so dusty, make it better for horses. Per lb., 28c. Write for prices in quantities.

WHITE DUTCH CLOVER

(Trifolium Repens.)

A small variety, having a white blossom. Of a vining nature, spreading rapidly. Superior for pasture and unsurpassed for the production of honey. It also makes a beautiful lawn when mixed with Blue Grass. Fancy Seed, per lb., 77c. Write for prices in quantities.

RED CLOVER

(Trifolium Pratense.)

The standard Clover for all purposes. Hardy and succeeds well on any good soil. Makes superior hay—especially mixed with Timothy—either for dairy cows or for general use. Per lb., 33c. Write for prices in quantities.

MAMMOTH RED CLOVER

Grows very large and is used almost exclusively for plowing under for manure. Per lb., 34c. Write for prices in quantities.

CRIMSON OR SCARLET CLOVER

(Trifolium Incarnatum.)

Highly recommended for pasture and fertilizing purposes. Is a thrifty annual, growing from twenty to thirty inches high. Germinates quickly, grows rapidly, and stools abundantly. Cut for hay when in full bloom. Planted in the Fall can be plowed under after blooming in the Spring and be followed with barley or potatoes. Lb., 32c. Write for prices in quantities.

BOKHARA SWEET OR HONEY CLOVER

(Melilotus Alba.)

A rapid-growing, white-flowered sort; excellent for bees. Sow 10 pounds per acre. Per lb., 24c. Write for prices in quantities.

GRASS SEEDS

The prices on Clover, Grass and Field Seeds may change as the season advances. Prices now given are those prevailing when this list was published. Kindly write for samples and current prices.

CENTRAL PARK LAWN GRASS MIXTURE

To obtain a good Lawn Grass Mixture, it is necessary that the best possible seed of fine grasses be used in the combination, embracing such varieties as are of neat, close growth, extreme hardness, and adapted to produce a quick, permanent sod. Judicious selection of seed, knowledge of the habits, vigor, quality and hardness of varieties used in the mixture can only be gained by thorough and practical tests under different climatic and soil conditions. After more than 25 years' experience, we offer our Central Park Lawn Grass Seed Mixture, composed of a thoroughly balanced combination of various native and foreign fine-leaved, deep-rooting grasses of interweaving habit, that will flourish under varied soil and climatic conditions, and which may be depended upon to produce a beautiful, compact evergreen sod that will resist tramping and hard usage, and at the same time present that handsome, velvety appearance so much desired. Sow one pound to 400 square feet.

Price, 60c per lb. Write for prices in quantities.

TIMOTHY

(Phelum Pratense.)

This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the Spring or Fall. Sow 15 to 20 pounds per acre. Per lb., 13c. Write for prices in quantities.

ORCHARD GRASS

(Dactyllis Glomerata.)

One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. Sow 28 pounds per acre. Per lb., 26c. Write for prices in quantities.

ITALIAN RYE

(Lolium Italicum.)

A quick-growing grass, attaining a height of 2½ to 4 feet; very desirable for temporary meadows or pastures (will last from two to six years). Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foliage that makes the best and sweetest hay imaginable. Sow 40 pounds per acre. Per lb., 17c. Write for prices in quantities.

KENTUCKY BLUE GRASS

(Poa Pratensis.)

One of the best grasses for permanent pasture, furnishing a constant supply of the most nutritious feed during the greater part of the year. Sow 28 pounds per acre.

For Lawns—Blue Grass is used very extensively for lawns and is found in all lawn grass mixtures. Sow 1 lb. to 400 sq. feet if used alone. Per lb., 45c. Write for prices in quantities.

RED TOP

(Agrostis Vulgaris.)

A good perennial grass. Generally sown for permanent pastures. Does best on moist or even marshy land. If the ground is not overflow land it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsike Clover. Sow 14 pounds per acre. Per lb., 35c. Write for prices in quantities.

Meadow Fescue (Festuca Partensis)—

Perennial; grows three or four feet high. Roots deep, thus resisting drought. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pastures, being valuable to mix with other kinds. Sown alone, use 40 lbs. per acre. Per lb., 22c. Write for prices in quantities.

All Grass, Grain and Field Seeds Are Subject to Market Fluctuations in Price. We Will

Fill Mail Orders at Price Prevailing on Date Order Is Received.

GRASS SEEDS—Continued

ENGLISH RYE GRASS

(*Lolium Perenne*.)

A strong growing hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. Forty pounds per acre.

For Lawns—This is used and recommended by many gardeners. If sown thickly it makes a fine lawn, and for large grounds and parks it is very successful. Per lb., 17c. Write for prices in quantities.

CANADIAN BLUE GRASS

(*Poa Compressa*.)

Recommended in all pasture mixtures on dry soil; thrives well on clay or hard trodden and poor soil. Sow 28 pounds per acre. Per lb., 35c. Write for prices in quantities.

Tall Meadow Oat Grass (*Avena Elatior*)

—Often attains a height of three to four feet by the middle of June. Makes splendid hay and thrives on sandy loam, but makes its best growth where there is some clay. Can be fed as a pasture grass, and will generally bear cutting three times. For mixing with Perennial Rye and Alfalfa for sandy soils it is excellent. Sow about 30 to 40 pounds per acre alone, or half that amount if mixed with the above varieties. Per lb., 40c. Write for prices in quantities.

Mesquite (*Holcus Lanatas*)—It is usually sown on virgin soil, without cultivation, after the ground has been burned over.

FOR SPECIAL MIXTURES for BURNS, DRY or WET LANDS—Temporary or Permanent Plantings for Hay or Pasture—**WRITE US**

Sow about 35 pounds to the acre chaff seed; hulled 15 pounds per acre. Fancy Hulled Seed, per lb., 30c. Write for prices in quantities.

Sheep Fescue (*Festuca Ovina*)—Grows freely in high, dry and open pastures. Its chief merit is for sheep pasture. Thirty five pounds to the acre. Per lb., 70c; Write for prices in quantities.

Hard Fescue (*Festuca Duriuscula*)—Fine, rather dwarf, justly noted for its drought resisting qualities. Valuable as a pasture for sheep. Sow 20 pounds per acre. Per lb., 90c. Write for prices in quantities.

Red or Creeping Fescue (*Festuca Rubra*)—Forms a close turf and is valuable for lawn and golf mixtures; thrives in sandy soils along the Coast (14 lbs. to the bushel.) Per lb., 90c. Write for prices in quantities.

RHODE ISLAND BENT

(*Agrostis Canina*.)

Resembles Red Top. Makes a close sod; valuable for permanent pastures and meadows. Twenty-eight pounds per acre. For lawns, use 12 to 15 pounds per 50-foot lot. Gives good results. **Can't Supply.**

CREEPING BENT GRASS

(*Agrostis Stolonifera*.)

Well adapted for sandy pastures, near the Coast, and good for pasture on low lands. If sown alone, use 25 pounds per acre. Excellent for lawns. Use 12 to 15 pounds per 50-foot lot. **Can't supply.**

GRAIN AND FIELD SEEDS

Grain and Field Seed Prices Subject to Change without Notice—Write for Prices

OATS

Swedish Select

A SPLENDID VARIETY; UNEQUALLED IN QUALITY

Swedish Select has long been popular, and a splendid variety for Puget Sound country. It yields very heavy crops, makes a very sturdy growth; the straw is of medium height and is extra large, making it less liable to lodge than any other variety. In quality it is by far the best of any oat that we have tested. It has a large spreading head, and the grain is large, plump, and very heavy. It is one of the very earliest varieties, and on account of its exceptionally fine quality and heavy yield is probably the most valuable variety grown in the great oat growing sections in Washington. Price per lb., 5c; Write for Prices in Quantities.

GRAY WINTER

This Oat is planted extensively throughout the Northwest as a Fall or Winter Oat. Is well and favorably known, being a good yielder, and the Oats are large and plump. Price per lb., 5c. Write for prices in quantities.

BEARDLESS BARLEY

Beardless—The earliest barley known. The straw is about the height of the Common Barley, but better, and will stand up on any land; with good season and land, has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. Many farmers will not grow Barley on account of the long, harsh beards which are so disagreeable in threshing, although it is a profitable crop. This is beardless, and as easy to grow and handle as oats. It is becoming more popular each season. Per lb., 5c. Write for prices in quantities.

White Hulless, or Bald Barley—A grand barley for stock feeding. Grain plump, heavy and when threshed is hulless, like wheat. A heavy cropper. When grown and cut for hay it produces a magnificent fodder, which is very rich and almost equal to a grain feed. Much relished by horses and stock of all kinds. An excellent hog feed. Per lb., 6c. Write for prices in quantities.

Field Peas—Field Peas are a very profitable crop and are grown here very extensively. They can be grown alone or with oats. When planted with grain and cut green they make a large amount of very rich feed; also very valuable for enriching the soil if plowed under. The dry peas make excellent hogfeed and are quite fattening. Sow, if alone, 120 pounds to the acre; if with other grain, 60 pounds.

Yellow Canadian—These small, round, smooth yellow peas are the most generally grown field peas for stock food, and great quantities are also used for human consumption. Per lb., 8c; Write for Prices in Quantities.

Green, or Bluebell—The seed is larger than the Yellow Canadian, and it has a bluish color, but is very similar in all other respects. Per lb., 8c. Write for prices in quantities.

Speltz—It will grow well and produce immense crops on poor soil. Dry weather seems to have no bad effect on it. After the grain is threshed out, the straw makes good hay. The grain has a hull, something like barley. Sow in the Spring, the same as wheat, at the rate of two bushels per acre. Cut when the grain is past the middle stage of milk, when it will make splendid grain and lots of rich straw hay. Thresh like wheat, only not so closely. Can be feed whole, rolled like barley, or ground. Per lb., 6c; Write for prices in quantities.

Prices Subject to Change Without Notice

GRAIN AND FIELD SEEDS—Continued

WHEAT

BLUE STEM—Spring

The best known and one of the most profitable Spring varieties for the Northwest. Heads are large and well-filled, stools freely. Grain very hard. Although a Spring variety, can be planted as a Fall Wheat in sections where Winters are mild. The Blue Stem of the Pacific Coast has a white grain and smooth chaff, quite unlike the Velvet Chaff and Red grains of the states East of the Rockies. Better results are had with this Wheat East of the Cascade Mountains, as it has a tendency to lodge in the moist sections on the Coast. Price lb., 5c; Write for Prices in Quantities.

RED RUSSIAN—Winter

This is extensively grown in Western Washington, where conditions are favorable. It grows vigorously, maturing late, and gives a heavy yield of both grain and foliage. It is a superior variety for chocking out weeds, growing close and luxuriantly. Price lb., 5c; Write for Prices in Quantities.

VETCHES OR TARES

Greatest Forage Plant

Common, or Spring (*Vicia Sativa*)—One of the best forage plants that can be grown on the Pacific Coast. Often called Fall Vetches. This is a species of the pea, and is grown very extensively. It furnishes an abundance of excellent feed, either green or cut and cured for hay. The seed should be mixed with an equal weight of some variety of wheat, oats or rye having a stiff straw, and the mixture sown at the rate of two bushels per acre. Vetches weigh 70 pounds per bushel. Sow in the Fall or early Spring. Per lb., 11c. Write for prices in quantities.

Sand, or Winter Vetches (*Cicia Villosa*)—This variety thrives on poor, arid, sandy soils. It is sown either in the Fall or early Spring, and is generally mixed with rye, which serves to support the plants. It grows to a height of three or four feet, and can be cut twice; first, as soon as the bloom appears, and afterward for seed. The plant is perfectly hardy and makes a very nutritious food. Per lb., 30c; Write for Prices in Quantities.

Rape, Dwarf Essex—We offer you true, pure seed. One of the best forage plants, on account of the large amount of green feed it will produce at a season of the year when everything else is dried up. It has yielded ten tons of green forage per acre, and has twice the feeding value of green clover. Sheep, swine, cattle and poultry eat it readily. Rape will do well on almost any soil. Prepare the ground as for turnips, and sow any time from May till September; or plant it with grain. Sow, per acre, four pounds, in drills; or, if broadcast, eight pounds. Lb., 20c. Write for prices on quantities.

BUCKWHEAT

Japanese—Ripens early—is hardy and yields the largest crops. The grains are extra large, dark brown, very thin hulled and makes the highest grade of flour. Good seed stock has been very scarce for several seasons, but we now have a fine lot which we can offer at a very low price. Per lb., 15c. We will gladly quote prices on large quantities.

MILLETS

Golden—An improved variety, yielding a larger crop of seed than the Common Millet. It is also taller than the Common, and yields a heavier crop of hay. Per lb., 15c. Write for prices in quantities.

Common—A well-known variety growing from three to four feet high; has broad blades and strong stalks. Per lb., 15c; Write for prices in quantities.

ARTICHOKE TUBERS

Jerusalem—Grown especially for hog feed and often yields 20 tons to the acre. Write for Prices.

BIRD SEED

Not for Planting

P. S. & I. Co.'s Best Mixed, per lb., 25c.
Canary—Best Re-cleaned, per lb., 15c.
Hemp, per lb., 15c.

SUNFLOWER

Mammoth Russian—The largest and most productive variety. It makes one of the very best of foods for poultry; a great egg producer. Per lb., 15c. Write for prices on quantities.

FLAX SEED

We have a splendid lot of selected re-cleaned Western-grown Flax, new crop, large plump seed. Per lb., 15.

Ground Flax for medicinal uses. Per lb., 15c.

Millet, per lb., 15c.

Rape, per lb., 15c.

Cuttle Bone, Large Bone, per oz., 5c.

Sunflower for Feed, lb., 15c; 10 lbs., \$1.25

IMPORTANT—READ CAREFULLY

Clover, Grass and Field Seeds are subject to market changes, therefore we can not print prices good for any length of time. When ready to buy, write us for special prices, stating quantity wanted, or send in your order at catalog prices. We guarantee that we will give you full value for the money sent, whether the price at the time you order be higher or lower, or if the difference is very great, we will notify you before shipment.

We Don't Pay Postage on Clover, Grass or Grain Seeds—See Inside Front Cover for Rates

POOLE'S

QUALITY SWEET PEAS AND FLOWER SEEDS



NEW SPENCERS—The new "Spencer" type has lovely waved and fluted flowers of gigantic size and exquisite colorings, length of stem, and lasting qualities are much superior to older types. "Spencers," however, are very shy seeders and require much careful selection to develop fixed types. The seed is therefore scarce, and cannot be cheaply produced.

WHITE

KING WHITE—The newest and most magnificent white; of perfect Spencer type; the immense petals gracefully frilled—are a pure white of wonderful substance. **Pkt., 10c; oz., 50c.**

WHITE SPENCER—A pure white flower of enormous size, beautiful crinkled and fluted, of splendid substance. **Pkt., 10c; oz., 50c.**

PINK

ANNIE BOWNASS—Flowers of largest size. Color rich, bright pink, heavily suffused salmon and amber on white ground. **Pkt., 10c; oz., 50c.**

HEBE—One of the latest. Giant clear rose pink of perfect form. **Pkt., 15c; oz., 75c.**

COUNTESS SPENCER—Pink. Improved strain. Flowers extremely large, beautiful expanded, crumpled and waved. Color soft shell pink, deeper at the outer edges, **Pkt., 10c; oz., 50c.**

ENCHANTRESS—1918 Novelty; early flowering, rosy pink. **Pkt., 10c; oz., 50c.**

FLORENCE MORSE-SPENCER—Deep blush pink. The flowers are extremely large, of the finest open wavy type; they are borne upon strong, stiff stems, four flowers to stem. **Pkt., 10c; oz., 50c.**

HERCULES—A magnificent soft rose-pink. The standard frequently measures two and one-half inches in diameter. **Pkt., 10c; oz., 50c.**

MARGARET ATLEE—Rich, glowing pink on cream ground. **Pkt., 10c; oz., 50c.**

MRS. HUGH DICKSON—Buff apricot and rose, large Spencer. **Pkt., 10c; oz., 50c.**

ROSE

DECORATOR—(Burpee's).—The color is rich rose overlaid with terra-cotta, intensifying to deep bright orange at base of wings. **Pkt., 10c; oz., 50c.**

APPLEBLOSSOM SPENCER—Rose. A truly giant flower; color standard rose with deeper veining, wings light carmine, ground color primrose. **Pkt., 10c; oz., 50c.**

HUMOGERM FOR SWEET PEAS—Makes larger flowers and prolongs the blooming period. Easily applied before planting. **Price 25c and 50c postpaid.**

FLOWER SEEDS—Continued

Burpee's Spencer Sweet Peas—Continued

RED

- King Edward Spencer**—Bright crimson scarlet, largest size, wavy standard; drooping wings, very long stems; one of the finest bright reds. Pkt., 10c; oz., 50c.
Geo. Herbert—Our own select strain; a bright rosy-carmine, open form, beautifully waved; a magnificent, vigorous Sweet Pea of giant size. Pkt., 10c; oz., 50c.
Vermillion Brilliant—Pure scarlet; one of the best of the latest novelties. Pkt., 10c; oz., 50c.

LAVENDER AND MAUVE

- Asta Ohn**—Lavender, suffused with mauve; of perfect form, largest size, 4 blossoms on long, strong stems; very vigorous. Pkt., 10c; oz., 50c.
Don Alvar—The flowers are of largest size. The color is a delightful soft silvery-blue or lavender. Pkt., 10c; oz., 50c.
The Lady Eveline—A charming shade of rosy-mauve. The beautiful large flowers are usually produced four on a stem. Pkt., 10c; oz., 50c.
Masterpiece—Large wavy lavender-tinted mauve. Pkt., 10c; oz., 50c.

ORANGE

- Helen Lewis**—A giant flower of perfect form; standard rich crimson orange, wings orange rose; open form, full, wavy. Pkt., 10c; oz., 50c.
Helen Grosvenor—A rich deep orange; the wings are salmon-rose, of extra-large size. Pkt., 10c; oz., 50c.
Illuminator—A brilliant orange-salmon ground, illuminated with bright cerise pink; a rare and wonderful color combination of great beauty. First class certificate. Pkt., 10c; oz., 50c.
Tangerine—This is the last word in orange color sweet peas. Deep orange, almost approaching the color of a tangerine orange. Flowers of great size, beautifully waved and well placed. Pkt., 15c; oz., 75c.

CREAM OR PRIMROSE

- Primrose Spencer**—A pronounced primrose or creamy white; excellent flower. Pkt., 10c; oz., 50c.
Dobbies Cream—Large deep cream, perfect form. Pkt., 10c; oz., 50c.

BLUE AND MAROON

- Wedgewood**—The best blue Spencer is a unique shade of lovely light blue. Pkt., 10c; oz., 50c.
Warrior—Color rich maroon, flushed with bronze. The flowers are of great size, perfectly formed and placed. Pkt., 10c; oz., 50c.
Splendor—One of the newest of sweet peas. The color is a rich mahogany-maroon, of giant size. Pkt., 15c; oz., 75c.

PURPLE—LILAC—HELIOTROPE

- Royal Purple**—The color is a rich, warm, rosy purple, the younger flowers having a slightly softer color tone. Pkt., 10c; oz., 50c.
Irish Belle, or Dream—A lovely rich lilac, flushed with pink. Pkt., 10c; oz., 50c.
Rosina—A rich rosy heliotrope with darker shadings in the folds of the standard, the wings bluish heliotrope, cream ground. Pkt., 10c; oz., 50c.
Senator Spencer—Claret and chocolate stripe, on light ground, large and most distinct, much admired; a profuse bloomer. Pkt., 10c; oz., 50c.

MIXED

- Poole Superb Spencer Mixed**—A splendid, well blended mixture of all true Spencer Types only. Pkt., 10c; oz., 25c; ¼-lb., 75c.

LIST OF CHOICE FLOWERS

Worthy of Special Attention, Embracing

ANNUALS, BIENNIALS, PERENNIALS, CLIMBERS AND EVERLASTINGS

All Flower Seeds Sent Free by Mail on Receipt of the Price Placed Opposite Each Variety

ACROLINIUM

(Everlasting Flower.)

Mixed—All colors, Annual. Pkt., 10c.

AGERATUM

Mexicanum—Light blue; annual; 1½ ft. Pkt., 10c.

Dwarf Blue—9-inch; fine for edgings. Pkt., 10c.

AGROSTEMMA

Coronaria—Mixed; 2 ft.; perennial. Pkt., 10c.

ALYSSUM

Maritimum (Sweet Alyssum.)—Annual; fragrant white flowers, in clusters; all summer; 1 ft. Oz., 30c; Pkt., 10c.

Compactum, Little Gem—Grows erect; 6 inch. ¼-oz., 25c; oz., 75c; Pkt., 10c.

Procumbens, White Carpet—Of trailing habit, forming a dense mass. ¼-oz., 25c; oz., 75c; Pkt., 10c.

AMARANTHUS

Cruentus (Prince's Feather) — Erect flowers; dark-red; 3 ft.; annual Pkt., 10c.

Tri-Color (Joseph's Coat)—Beautifully variegated, foliage scarlet, yellow and green, 2½ ft.; annual. Pkt., 10c.

ASTERS

Branching—Forms broad bushes, with large, long petaled flowers, graceful and feathery in effect; excellent for cut-flowers; 2½ feet.

Crimson. Pkt., 10c.

Lavender. Pkt., 10c.

Pink. Pkt., 10c.

White. Pkt., 10c.

Mixed. ¼-oz., 35c; oz., \$1.00; pkt., 10c.

CREGO, GIANT—On the style of "Giant Comet," large flowers. Fine for cutting; 2 ft.

Mixed. Pkt., 10c.

FLOWER SEEDS—Continued

ASTERS OSTRICH-PLUME

Splendid class; fine for cutting; rivals the chrysanthemum in effect.

Mixed. Pkt., 10c; $\frac{1}{4}$ -oz., 40c; oz., \$1.25.

QUEEN OF THE MARKET

The best early Aster; of graceful, spreading habit, and bearing its flowers on long stems. Height $1\frac{1}{2}$ feet.

Dark Blue. Pkt., 10c.

Light Blue. Pkt., 10c.

Crimson. Pkt., 10c.

Scarlet. Pkt., 10c.

White. Pkt., 10c.

Mixed. Pkt., 10c; $\frac{1}{4}$ -oz., 35c; oz., \$1.00.

TRUFFAUT'S PAEONY PERFECTION

Grows stiffly erect and about 18 inches tall. Remarkable for the brilliant colors of its great, incurved flowers. Mixed, Pkt., 10c; $\frac{1}{4}$ -oz., 75c; oz., \$2.50.

COMET, GIANT

Very large flowers. Grows 2 feet. Pkt., 10c.

Dark Blue. Pkt., 10c.

Crimson. Pkt., 10c.

Rose. Pkt., 10c.

White. Pkt., 10c.

Mixed. $\frac{1}{4}$ -oz., 35c; oz., \$1.00; Pkt., 10c.

ARABIS

An interesting, early flowering hardy perennial, adapted for ornamental rock-work and edgings.

Alpina (Rock Cross)—White; 9-inch. Pkt., 10c.

ASPARAGUS

Beautiful, fern-like foliage; fine for bouquets; an excellent house plant; white flowers; 4 to 6 feet.

Plumosus Nanus (gP.)—The dwarf variety so largely used by florists. Pkt., 10c.

Syrengeri (gP.)—Fine for basket-work and for use with cut flowers. Pkt., 10c.

BACHELOR'S BUTTON

(Centaurea Cyanus)

Emperor William

Cyanus—Blue; one of the finest of all Cornflowers, and much used for cutting. Pkt., 10c., oz., 50c.

Candissima—Silvery white leaves. Pkt., 10c.

BALLOON VINE

A rapid, graceful climber, with inflated seed pods; flowers white. Tender annual. Pkt., 10c.

BALSAM

(Ladies' Slipper—Touch-Me-Not.) Hardy annual, easily grown.

Finest Double, Mixed—A splendid assortment. Pkt., 10c; $\frac{1}{4}$ -oz., 20c.

BEGONIA

Semperflorens, Mixed—Perennial. Pkt., 25c.

CALCEOLARIA

Rugosa, Mixed—Finest shrubby varieties for bedding; bear a profusion of beautiful flowers of various colors; 1 ft. Pkt., 50c.

CALENDULA—POT MARIGOLD

Hardy annuals about a foot high. Sow in the open ground early in Spring, and the plants will bloom early in Summer, continuing until late in Autumn. Mixed. All Sorts. Pkt., 10c.



CALLIOPSIS

Mixed Annual Sorts. Pkt., 10c; $\frac{1}{2}$ -oz., 25c.

COREOPSIS

Lanceolata—A perennial, blooming the first year; flowers rich yellow, single; very fine for cutting. Pkt., 10c; $\frac{1}{4}$ -oz., 30c.

CANTERBURY BELL

(Companula Medium)

Very ornamental garden plants of the easiest culture; hardy biennial, two and a half feet high, producing large, nodding and charming bell-shaped flowers of many exquisite shades. Single Blue. Pkt., 10c; Single Mixed. Pkt., 10c; Double Mixed Pkt., 10c.

CANARY BIRD FLOWER

(Tropaeolum Canariensis)

Climbing plant with graceful foliage and yellow blossoms. Half-hardy annual. Pkt., 10c; $\frac{1}{4}$ -oz., 15c.

CANDYTUFT

(Iberis)

The Candytufts are among our best hardy annuals for edgings, bedding, massing or rockeries, and for cutting.

Little Prince

Very large heads of pure white flowers; fine for border and pots; 6-in. Pkt., 10c. Mixed Annual Sorts. Pkt., 5c; oz., 60c.

Sempervirens—Perennial. White. Pkt., 10c.

CANNA—INDIAN SHOT

One of our best bedding plants; beautiful, ornamental foliage and large, brilliant flowers. Hardy perennial.

Finest Mixed—Crozy's Hybrids; very fine. Pkt., 10c.

FLOWER SEEDS—Continued



CARNATIONS
(*Dianthus Caryophyllus*)

Giant Margaret—Extra large and perfect, flowering in a rich variety of colors; 80 per cent of the flowers generally come double. A splendid sort for cutting; 1 ft. Pkt., 10c.

Early Dwarf Vienna—Double mixed. Pkt., 10c.

CELOSIA COCKSCOMB

Graceful, free-blooming, half-hardy annuals. Finest varieties, mixed. Pkt., 10c; ¼-oz., 25c.

CRYSANTHEMUM

Very showy, effective and desirable as Summer flowering plants. Hardy annuals.

Coronaria—Double mixed. Pkt., 10c.

Tricolor—Single mixed. Pkt., 10c.

Tricolor—Single and double mixed. Pkt., 10c.

Frutescens (*Marguerite*, or *Paris Daisy*) Pkt., 10c.

Shasta Daisy (*Leucanthemum Perennial*) Pkt., 10c.

CLARKIA

Handsome, free flowering annuals of easy cultivation. Produce a fine effect massed in beds. Flowers are very bright and attractive. Single double mixed. Pkt., 10c; ¼-oz., 20c.

COBAEA SCANDENS

A handsome, rapid-growing, climbing plant, having large, bell-shaped flowers, beautiful foliage and peculiarly delicate and curious tendrils. Purple. Pkt., 10c.

CLEMATIS (Virgin's Bower)

Excellent, hardy, climbing perennials for trellises, arbors, verandas, etc. Do well in most locations.

Crispa—Pale purple; floriferous; 10 ft. Pkt., 10c.

Paniculata—White, fragrant, very free blooming; 10 to 20 ft. Pkt., 10c

Jackmani Hybrids—Mixed. Collection of the best colors; 10 to 15 ft. Pkt., 15c.

COLUMBINE (*Aquilegia*)

Universal favorite for hardy borders and beds. Perennial.

Double mixed. Pkt., 10c.

Single mixed. Pkt., 10c.

COSMOS

One of the very finest late Summer and Fall flowers. Excellent for cutting. The plants grow tall and are full of pink, white and crimson blossoms. Cosmos should be in every garden. Grows easily.

Early flowering mixed. Pkt., 10c; ¼-oz., 20c.

Mammoth mixed. Pkt., 10c; ¼-oz., 20c.

Klondyke—Orange-colored; distinct foliage. Pkt., 10c.

CYCLAMEN

A tender bulbous perennial, used in green houses and window gardens. It can be grown from seed with a little care. Sow in Fall or early in the Spring.

Finest mixed. Pkt., 35c.

CYPRESS VINE

A tender climbing annual. Grows rapidly. Has handsome fern-like foliage and brilliant attractive scarlet flowers.

Ivy leaved with orange-scarlet flowers. Pkt., 10c.

DAHLIA

This favorite half-hardy perennial is most easily grown from seed sown early in the house or greenhouse. Will bloom freely outdoors until frost the first season; 3 to 6 feet.

Double mixed. Pkt., 10c.

Single mixed. Pkt., 10c.

Single Cactus, mixed. Pkt., 10c.

DAISY Bellis Perennis

A well-known and popular, low-growing plant bearing beautiful flowers. Hardy perennial.

Double Rose (Longfellow). Pkt., 10c.

Double White (Snowball). Pkt., 10c.

Double Mixed. Very fine. Pkt., 10c.

Double Maxima, mixed. Extra large. Pkt., 15c.

Shasta Daisy—(See *Chrysanthemum Leucanthemum*).

Daisy (*Paris Daisy*)—See *Chrysanthemum frutescens*.

Delphinium—(See *Larkspur*.)

DIMORPHOTHECA

(*African Orange Daisy*)

Easily grown, hardy annual of great beauty; 12 to 15 ins. in height, and bushy.

Aurantiaca—Orange; very fine. Pkt., 10c.

FLOWER SEEDS—Continued

ESCHSCHOLTZIA

(California Poppy)

These are among our most beautiful and popular annuals, being of the easiest culture and giving great satisfaction. They commence to bloom within a few weeks' time from Spring-grown seed and continue to flower profusely until late in the Autumn, forming nice, bushy plants, one foot high.

Thorburni—Coppery Orange; very large. **Pkt., 10c.**

California—Rich Yellow. **Oz., 25c; Pkt., 10c.**

Mixed—Many sorts. $\frac{1}{4}$ -oz., 20c; oz., 50c; **Pkt., 10c.**

EUPHORBIA

Very ornamental-leaved, strong-growing hardy annuals; fine for beds and borders; 2 to 3 feet.

Variegata (Snow on the Mountain.) Green and white foliage. **Pkt., 10c.**

ECHINOCYSTIS, LOBATA

(Wild Cucumber)

A rapid growing climber. Very good for covering old fences or trellises. Hardy annual. **Pkt., 10c.**

FORGET-ME-NOT—Myosotis

Beautiful Spring favorites, of easy growth, bearing clusters of lovely small flowers. They are perennials and are hardy enough to remain in the open ground except in very cold latitudes. Fine for borders and shady situations.

Alpestris—Of trailing habit, with pretty blue flowers. $\frac{1}{4}$ -oz., 40c; **Pkt., 10c.**

Hybridus — Pure Forget-me-not-blue. Fine for cutting and for hanging baskets. **Pkt., 10c.**

Palustris—(True Forget-me-not). Dark blue; blooms the second year abundantly all season; the best known of all. **Pkt., 10c.**

FOUR O'CLOCK

Mirabilis—Favorite half-hardy annual of the easiest culture and very suitable for large beds and borders.

Hybrids, Mixed—Fine assortment; 2 ft. **Oz., 25c; Pkt., 10c.**

FOXGLOVE

Digitalis—A tall growing biennial, with large leaves and spikes of vari-colored and spotted flowers. A magnificent plant. Fine for borders or background. Easily grown. **Mixed. Pkt., 10c.**

GAILLARDIA—BLANKET FLOWER

Picta Mixed—Annual. Many shades of yellow, orange and scarlet. **Pkt., 10c.**

GERANIUM

A half-hardy perennial, easily and quickly grown from seed.

Zonale. Pkt., 10c.

GEUM

Chiloense

Hardy perennial. Free-blooming plants. Fine for bouquets.

Coccineum—Scarlet. **Pkt., 10c.**

GODETIA

The Godetias are profuse and constant bloomers, and their delicate tints of crimson, rose and white render them very attractive. Hardy annuals.

Lady Albermarle—Dark Crimson. **Pkt., 10c.**

Mixed, Tall varieties. **Pkt., 10c. ---**

Mixed, Dwarf Varieties. **Pkt., 10c.**

GOURDS

Of rapid growth, and bearing curious fruits of various sorts.

Mixed—A fine assortment. **Pkt., 10c.**

GYPSOPHILA—Baby's Breath

A pretty, free-flowering plant. Fine for bouquets.

Paniculata—Foliage fine; covered with tiny pure white flowers. Hardy, perennial. **Pkt., 10c.**

HELIOTROPE—Cherry Pie

Delightfully fragrant, free-blooming, tender, perennial plants. Splendid for bedding or pot culture. One foot high of spreading habit. The fragrance of its flowers can not be excelled in exquisite delicacy. Invaluable for bouquets.

Choice Mixed. Pkt., 10c.

HOLLYHOCK

(Althea)

A hardy perennial of easy culture and a very satisfactory flower. Makes an excellent background and does well most any place you plant.

Double Hollyhocks, Rosette—

Double Bright Pink. Pkt., 10c.

Double Bright Rose. Pkt., 10c

Double Bright Scarlet. Pkt., 10c.

Double Light Rose. Pkt., 10c.

Double Lilac. Pkt., 10c.

Double Maroon. Pkt., 10c.

Double Salmon. Pkt., 10c.

Double Snow-White. Pkt., 10c.

Double Yellow. Pkt., 10c.

Mixed Double. $\frac{1}{4}$ -oz., 50c; Pkt., 10c.

HUMULUS—Climbing Hop

The well-known fast growing, hardy annual climber; 15 to 20 feet.

Japonicus Variegatus—With white-variegated leaves; fine. **Pkt., 10c.**

HYACINTH BEAN—Dolichos Lablab

Rapid growing, ornamental, climbing annuals, bearing clusters of beautiful purple and white flowers, followed by highly ornamental seed pods. **Mixed. Oz., 20c; Pkt., 10c.**

ICE PLANT

Mesembrianthemum Crystallinum—Pretty Summer trailing annual for vases and rock work; leaves covered with ice-like drops. **Pkt., 10c.**

KOCHIA TRICHOPHYLLA—Summer Cypress or Fire Bush.

Annual forms highly decorative bushes, foliage green, turning to fiery red in Autumn. **Pkt., 10c.**

LANTANA

A free-flowering shrubby plant, suitable for outdoor or pot culture. The flowers emit an agreeable odor and are of many shades of purple, orange and white.

Hybrida Fine Mixed. Pkt., 10c.

FLOWER SEEDS—Continued

LARKSPUR—Delphinium

A very ornamental class of profuse blooming plants. Their tall spikes of many colored flowers produce a striking effect when planted in groups.

Ajaxis, Dwarf Rocket—Finest colors; very beautiful for bedding; 1 ft. **Pkt., 10c.**

Ajaxis, Tall Rocket—Long, showy spikes; mixed colors; 2 ft. **Pkt., 10c.**

Perennial Mixed—Single. **Pkt., 10c.**

Lathyrus Latifolius—(Perennial pea). These have not the fragrance of sweet peas, but bloom through a long season; are hardy and will live for years; they make a beautiful screen for rocks, stumps, fences, etc.; 4 to 8 ft. **Pkt., 10c.**

Crimson—Beautiful shade. **Pkt., 10c.**

Pink Beauty—Blossoms white, veined, edged and shaded pink. **Pkt., 10c.**

White—A pretty white form of above. **Pkt., 10c.**

LINARIA—Toad Flax

Snapdragon shaped flowers, fine for cutting. The dwarf-growing varieties are desirable for edgings and rock work; all of the easiest culture.

Cymbalaria—(Kenilworth Ivy). Charming, hardy perennial, trailing plants for baskets, rock work, etc. **Pkt., 10c.**

LINUM—Flax

Pretty, free-flowering garden plants of easy cultivation.

Grandiflorum Rubrum—The favorite "Scarlet Flax." Large flowered; 1 ft., annual. **Pkt., 10c.**

LOBELIA

Delicate, low-growing, annual plants of the greatest value for borders, ribbons, edgings, rock work and hanging baskets.

Gracilis—Blue, trailing, beautiful for baskets. **Pkt., 10c.**

Crystal Palace Compacta—Plant dwarf flowers very fine and rich, deep blue; finest for bedding and edging. **Pkt., 10c.**

LOVE-IN-A-MIST—Nigella

Pretty and ornamental hardy annuals, with feathery, fennel-like foliage and curious flowers; of easiest culture. Also called "Devil-in-a-bush." 1 to 1½ ft.

Mixed, all sorts. Pkt., 10c.

MARIGOLD OR TAGETES

The French and African Marigolds are valuable for their flowers in Summer, and can be grown to advantage in little clumps with other plants in the front of shrubberies or in the garden border. Color of flowers, yellow, red, brown and variegated.

African Double Mixed. Pkt., 10c.

French Double Mixed. Pkt., 10c.

MATRICARIA

Free flowering, hardy annuals; with a profusion of dainty flowers; bloom all summer; good for bedding or pots; 1½ ft.

Capensis—(Feverfew). Small, double, white flowers; pretty and neat. **Pkt., 10c.**

MAURANDYA

Rapid growing, half hardy perennial climbers that can be treated as annuals. Fine for garden or green house; bloom all Summer in hanging baskets and vases or on trellises; 10 ft.

Mixed. Pkt., 10c.

MORNING GLORY—Japanese

The tall varieties are popular, well-known rapid growing climbers of the easiest cultivation. Very fine for covering arbors, trellises, porches, etc.

Finest Single Mixed—Large flowered; all colors. **Pkt., 10c.**

Fringed Single Mixed—All beautifully fringed. **Pkt., 10c.**

Double Flowered Mixed—Superb mixture of double sorts. **Pkt., 10c.**

MOON FLOWER—Ipomoea Mexicana Grandiflora

Rapid growing climber belonging to the Morning Glory family. The flowers are large, wavy white and very showy. **Pkt., 15c.**

MIGNONETTE—Reseda

A half hardy annual that is known by every one, and is planted for its fragrant flowers, which come thickly. Set on compact spikes.

Reseda Odorata Grandiflora—(Sweet Mignonette). **Oz., 25c; Pkt., 10c.**

Golden Queen—Golden yellow. **Pkt., 10c.**

Machet, Dwarf—Deep red. **Pkt., 10c.**

MIMOSA PUDICA—Sensitive Plant

A curious and interesting, half hardy annual, with pinkish flowers; leaves close when touched; 1½ ft. **Pkt., 15c.**



Nasturtiums—See next page

FLOWER SEEDS—Continued

NASTURTIUMS

DWARF TOM THUMB—*Tropaeolum Nanum*

These have neat, compact habit and attractive foliage; they bloom in two months from sowing, and most profusely the whole season; 1 ft.

Beauty—Yellow and scarlet. **Pkt., 10c.**

Chameleon—Mottled crimson, bronze and yellow; very fine. **Pkt., 10c.**

Empress of India—Deep crimson; fine dark foliage. **Pkt., 10c.**

Golden Cloth—Golden yellow leaves; scarlet flowers. **Pkt., 10c.**

King of Tom Thumbs—Scarlet; fine color. **Pkt., 10c.**

King Theodore—Black, velvety; darkest of all. **Pkt., 10c.**

Lady Bird—(Spencer). Golden yellow, spotted red brown; foliage light green. Crop failure; cannot supply.

Ruby King—Ruby-red; large flowers; dark leaved; fine and very profuse. **Pkt., 10c.**

Mixed, Spotted Varieties—Spotted, blotched and marbled sorts. Crop failure; cannot supply.

Mixed, All Sorts—All sorts mixed. **Oz., 15c; ¼-lb., 50c; ½-lb., 90c; lb., \$1.75.**

TALL OR CLIMBING—*Tropaeolum Majus*
Tropaeolum Majus—Besides their ordinary garden use for trailing over fences, trellises, stone walls, etc., these can also be grown as pot plants for winter flowering, as screens, or as trailers for hanging baskets and vases; 8 to 12 ft.

Dark Crimson. **Pkt., 10c.**

Jupiter—Giant flowered; beautiful golden yellow. Crop failure; cannot supply.

King Theodore—Black. **Pkt., 10c.**

Scarlet—**Pkt., 10c.**

Schulzi—Darkest leaved scarlet. Crop failure; cannot supply.

Fine Mixed—**Pkt., 10c; oz., 15c; ¼-lb., 50c; ½-lb., 85c; lb., \$1.50.**

LOBB'S CLIMBING *Tropaeolum Lobbianum*

This class is remarkable for the intensely brilliant colors of its flowers, which are a trifle smaller than those of other sorts. In moderately rich soil they climb high and bloom brilliantly. Average height, 6 ft.

Crown Prince of Prussia—Blood-red. **Pkt., 10c.**

Firefly—Dark orange-yellow, spotted bright scarlet dark leaved. **Pkt., 10c.**

Geant des Batailles—Sulphur and red. **Pkt., 10c.**

Golden Queen—Fine yellow; contrasts effectively with foliage. Cannot supply; crop failure.

Ivy-Leaved Scarlet—Dark leaves, like ivy; deep scarlet flowers. Cannot supply; crop failure.

Lilliput, Snow Queen—Cream-white, very delicate tint. **Pkt., 10c.**

Lucifer—Dark scarlet; dark leaves. **Pkt., 10c.**

Queen Wilhelmina—Queen of the Lobb varieties. The foliage is veined and marbled white, setting off the rich rosy scarlet flowers to great advantage. One of the most effective of the list. **Pkt., 10c.**

Finest Mixture. **Oz., 15c; pkt., 10c.**

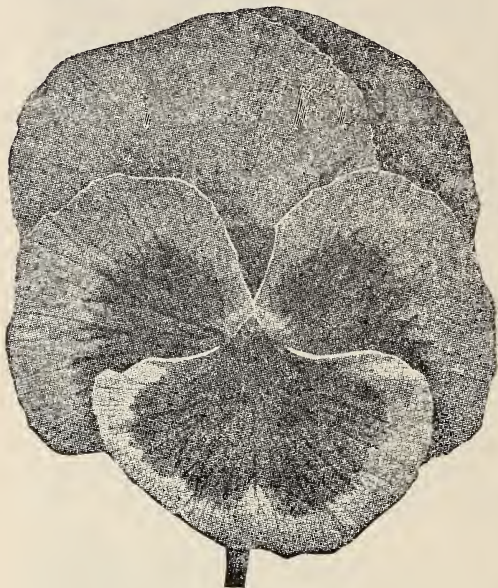
NEMOPHALIA—Love Grove

Hardy annuals of neat, dwarf, compact growth; fine for borders, pot culture or rockeries. Flowers blotched and beautiful. **Mixed. Pkt., 10c.**

NICOTIANA

A very showy plant, producing star-shaped flowers of delicious perfume. Taken up in the Fall, cut back and potted, will bloom freely all Winter. Half hardy annual, 3 ft. high.

Affinis—White. **Pkt., 10c.**



PANSIES

Poole's Superb—The richest and most choicely varied mixture possible. It produces only the finest colors, largest flowers and most beautiful forms. **Pkt., 25c.**

Odier, Cassier and Bugnot, Mixed—An extremely rich, large flowered mixture. **Pkt. 25c.**

Non Plus Ultra—A very rich mixture, largely made up of Cassier and Trimardeau varieties. **Pkt., 25c.**

Azure-Blue—Very fine color. **Pkt. 10c.**

Black—(Faust; King of the Blacks.) Almost coal black. **Pkt., 10c.**

Bronze—Golden bronze. **Pkt., 10c.**

Cardinal—Brilliant red; very fine. **Pkt., 25c.**

Emperor William—Splendid; ultramarine blue; very showy. **Pkt., 10c.**

Peacock—Large, peacock-blue flowers, edged with white. **Pkt., 15c.**

Snow Queen—(Candissima.) Pure satiny white. **Pkt., 10c.**

Yellow, Maroon Eye—Large flowers of distinct coloring. **Pkt., 10c.**

Trimardeau Giant—Mixed. **Pkt., 15c.**

Fine Mixed. **Pkt., 10c.**

PENTSTEMON

Beautiful herbaceous perennials; very hardy and free flowering; fine for beds and borders or rock-gardens; excellent cut-flowers.

Mixed Large Flowered Varieties—3 ft. **Pkt., 10c.**

GIANT PANSY PLANTS CARRIED IN SEASON.

FLOWER SEEDS—Continued

PETUNIAS

They grow with very little care in any soil and bloom all spring and summer. The seed should be sowed carefully and just pressed into the ground, and covered with moss or sand.

All colors separate. Pkt., 10c.

Perfection Mixed—Choicest fringed sorts. Pkt., 10c.

Mixed Single—Fine colors. Pkt., 10c.
Giants of California. Pkt. 50c.

PHLOX DRUMMONDI—Flame Flower

The hardy annual Phloxes are dazzling in effect, particularly so when grown in masses or ribbon beds of contrasting colors. Few flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost and care.

Alba—Pure white flowers borne in profusion all Summer. Pkt., 10c.

Chamois-Rose—A soft shade. Pkt., 10c.

Kermesina Splendens—Vivid crimson; extra large flowers. Pkt., 10c.

PINKS—Dianthus

The Dianthus family embraces some of the finest of all flowering plants. The blooms are of the richest and most pleasing colors, and nothing can surpass the exquisite fragrance of some varieties. They are hardy, and become perennial in warm climates.

Double Mixed China Pink—All best colors. Pkt., 10c.

Heddewigii, Single Mixed. ¼-oz., 25c; Pkt., 10c.

Imperial Double Mixed. Pkt., 10c.

Plumarius. Pkt., 10c.

POPPY—Papaver

Before tulips are fairly gone, our gardens begin to be gay with Poppies. Few flowers have the same grace of stem, airiness of poise and delicacy of tissue. For beds and borders with a background of green there is nothing finer.

Oriental Brilliant—Vivid scarlet; beautiful; perennial. Pkt., 10c.

Nudicaule—(Iceland Poppy.) These dwarf, bright yellow Poppies form one of the chief attractions of the garden through several months. They are most beautiful when grown in masses from seed sown every year; 1 ft. Pkt., 10c.

Shirley, Santa Rosa Hybrids—Beautifully crimped petals; shades of blue, lavender, salmon, etc. Pkt., 10c; oz., 50c.

Glaucum—(Tulip Poppy.) Striking, tulip shaped flowers of intensely brilliant scarlet; dwarf. Pkt., 10c.

Double, American Flag—White, bordered with scarlet, and exceedingly brilliant flowers. Pkt., 10c.

Double Mixed, All Sorts. Oz., 30c; Pkt., 10c.

Flanders Poppy. Pkt., 10c; oz., 75c.

California Poppy—(See Escholtzia.)



Shirley Poppy

PORTULACA—Rose Moss

Brilliant dwarf annuals, only six inches high, luxuriating in warm situations, and blooming profusely from early summer to autumn. For low beds and masses of color from spring until frost, they are indispensable; colors range through innumerable shades of red, yellow, pink, white, striped, etc.

Single Mixed. Pkt., 10c.

Double Mixed. Pkt., 10c.

PRIMROSE—Evening Primrose

The *Oenothera* or Evening Primrose blooms all summer very freely; the bright, poppy-like flowers open early every evening and last well into the next day; of the easiest culture in sunny situations.

Oenothera, Mixed Annual Varieties. Pkt., 10c.

RICINUS—Castor-Oil Plant

Picturesquely showy and imposing, the *Ricinus* gives to the garden magnificent semi-tropic effects. Grown as a specimen, it makes a perfect pyramid of gigantic leaves.

Borboniensis Arboreus—Green foliage; 15 ft. Pkt., 10c.

Cambodgensis—Glistening dark maroon; stems black; 5 ft. Pkt., 10c.

Hybridus Panormitanus—Cross between *Cambodgensis* and *Zanzibariensis*. Huge dark brown leaves, blue-powdered stems; upright habit. Pkt., 10c.

SALPIGLOSSIS—Painted Tongue

Produces very showy, funnel-shaped flowers of large size. Fine for beds. Half-hardy annuals.

Fine Tall Mixed. ¼-oz., 25c; Pkt., 10c.

Fine Dwarf—Mixed. ¼-oz., 25c; Pkt., 10c.

FLOWER SEEDS—Continued

SALVIA—Flowering Sage

Very ornamental; flowers borne in spikes of fiery red or crimson, and continue in bloom in open ground until after severe frosts. Start in heat and transplant into light soil, one to two feet apart. Excellent for bedding in masses or single planting. Hardy annuals.

Salvia Zurich—New Dwarf Early. The finest of all Dwarf Salvias. Very floriferous. **Pkt., 10c.**

Bonfire—(Clara Bedman). One of the finest Salvias ever introduced; compact bush about two feet in height and diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark green foliage and completely cover the plant. **Pkt., 10c.**

SMILAX

A well known greenhouse climber, with small, dark, green foliage; of great value in floral work; 8 ft. **Pkt., 10c.**

SNAPDRAGON—Antirrhinum

One of the most useful and showy of border plants of almost every color, and striped as beautifully as Carnations. They have recently been much improved and are now really magnificent. Hardy perennial.

TALL VARIETIES—

Album—White. **Pkt., 10c.**

Delicate Rose. **Pkt., 10c.**

Mixed. **Pkt., 10c.**

TALL, LARGE FLOWERING VARIETIES

Blood-Red—Fine color. **Pkt., 10c.**

Queen Victoria—Pure white. **Pkt., 10c.**

White—Beautiful for cutting. **Pkt., 10c.**

Yellow—A pure, soft color. **Pkt., 10c.**

Large Flowered, Mixed—Fine. $\frac{1}{4}$ -oz., 30c; oz., 75c; **Pkt., 10c.**

STOCKS—Double Ten Weeks

These popular flowers are easily grown, and are so highly fragrant and of such beauty that they deserve a place in every garden. Half hardy annuals.

Large Flowering Dwarf Pyramidal—Finest mixture. **Pkt., 10c.**

Dwarf Large Flowering—Long, splendid spikes; large double flowers. **Pkt., 10c.**

Mixed. **Pkt., 5c.**

DRESDEN PERPETUAL, OR BRANCHING

"Cut-and-Come-Again"—Double white **Pkt., 10c.**

SUNFLOWER—Helianthus

Stately growing annuals with immense golden yellow flowers; effective for garden decoration.

Argyrophyllus—(Texas Silver Queen). Has handsome silvery foliage and a profusion of small, elegant, single flowers; 4 ft. **Pkt., 10c.**

Cucumerifolius Orion—A very handsome variety, with petals twisted like those of the best cactus dahlias; long, stiff stems; excellent for cutting. **Pkt., 10c.**

Cucumerifolius Hybridus fl. pl.—A splendid mixture of double and semi-double sorts. **Pkt., 10c.**

Double Globe Flowered—Ball shaped; blooms late; 3 ft. **Pkt., 10c.**

Double Macrophyllus Giganteus—Huge leaves and yellow flowers; 5 ft. **Pkt., 10c.**

SWEET WILLIAM—Dianthus Barbatus

A well known, remarkably free flowering plant of brilliant colors, ranging from

snow white to darkest crimson and purple. They emit a very delicate and refreshing fragrance. Hardy perennial.

Single Mixed—Very beautiful. $\frac{1}{2}$ -oz., 25c; **Pkt., 10c.**

Double Mixed. **Pkt., 10c.**

TRITOMA

Sometimes called Red Hot Poker. This is a fine handsome plant. It is hardy, though requiring some protection through the winter. The flowers are produced in large spikes of brilliant rich colors. Cut flowers keep a long time. Half hardy perennial.

Mixed New Hybrids—Strikingly handsome, 2 to 5 ft. **Pkt., 10c.**

VERBENA

Very few annuals will make such a gorgeous display during the summer months, or furnish more flowers for cutting, than the Verbena. Start seed in the house or under glass three or four inches of growth. They flower in July and continue strong and healthy until destroyed by frost.

Hybrid Condidissima—Large trusses of purest white flowers. **Pkt., 10c.**

Hybrid Coerulea—Bright blue in various shades. **Pkt., 10c.**

Hybrid Defiance—Intensely brilliant scarlet; fine for bedding. **Pkt., 10c.**

Double Scarlet—Different shades. **Pkt., 10c.**

Hybrida Finest Mixed—Extra choice. **Pkt., 10c.**

Hybrida Mammoth, Rose Queen—Brilliant rose colored flowers, 1 to $1\frac{1}{4}$ inches across when well grown, produced in magnificent large umbels. **Pkt., 10c.**

VINCA—Madagascar Periwinkle

Handsome, bushy bedding plants, that flower luxuriantly and most profusely all summer from seed sown in February or March in heat; fine also for pot culture in window garden, or greenhouse; 1 to $1\frac{1}{2}$ ft.

Mixed. **Pkt., 10c.**

VIOLET—Sweet Scented

(Viloa Odorata)

Much prized for spring blooming. All the varieties have great beauty, are very fragrant and quite hardy; 6 in. Violet seed takes a long time to germinate.

Blue. **Pkt., 10c.**

The Czar—Very large; dark blue. **Pkt., 10c.**

VIRGINIA STOCK—Malcomia Maritima

Early and very free flowering, dwarf, hardy annuals of easy culture; bright blossoms; most effective for edgings or beds; 1 ft.

Crimson King—Very fine. **Pkt., 10c.**

WALL FLOWER—Cheiranthus Cheri

Produces spikes of beautiful, exceedingly fragrant flowers. Half hardy perennials.

Single Mixed—Large flowering. **Pkt., 10c.**

Double Dwarf Branching Mixed. **Pkt., 10c.**

ZINNIA ELEGANS

Of the easiest cultivation and should be in every collection. Half hardy annuals.

Tall Double Mixed. **Pkt., 10c.**

Dwarf Double Mixed. **Pkt., 10c.**

When you think of SEEDS think of POOLE

HIGH GRADE FERTILIZERS

The Base Is Bone Meal and Tankage—No Cheap Filler. Every pound Is Good Fertilizer.

DIAMOND QUALITY Fertilizers are complete fertilizers of the highest grade and concentration, no inferior ingredients or cheap fillers are used in their preparation. Bone Meal and Tankage forming the base to which is added the necessary Potash, Nitrogen and Phosphoric Acid. Each package is marked plainly, showing the percentage of available plant food.

Our fertilizers contain generous supplies of vital plant food. Being highly concentrated and readily available, small quantities only are needed for the production of the finest crops. **THEY ARE QUICK IN ACTION, RELIABLE AND ECONOMICAL.**

FERTILIZING ELEMENTS

NITROGEN

Nitrogen is necessary for the production of plant life, and without it there can be no plant growth; it is a powerful stimulant, and, when present in excess, causes a rapid and excessive, but watery and unnatural growth, which is made at the expense of fruitfulness. Too much nitrogen on wheat shows its ill-effects in such a rank growth of the plant, and later, of straw, as to be unable to sustain its own weight until the grain is matured; on hops, by great growth of plant and but few blossoms, which mature fewer burrs; on fruit trees by a rapid and sappy growth which produces little fruit.

Leguminous crops (such as clover, beans, peas, etc.) draw their supply of nitrogen principally from the air, and, therefore, an artificial application of nitrogen fertilizer to this class of plants is rarely needed.

PHOSPHORIC ACID

Phosphorus in the form of phosphoric acid is necessary for the healthy growth of plants, and is essential to the best production of straw and seed. Its deficiency in a soil is shown by the want of vigor in its plant life. To produce its full effect, however, it must be used on a soil already rich in nitrogen, or to be associated with nitrogen in the fertilizer; otherwise it will produce a tall, pale and spindling growth of straw with very small increase of grain or fruit. **It has a marked effect in hastening maturity and should be used freely on all crops which should be ripened early and is especially useful for increasing all crops of seed grain.**

Acid Phosphate contains lime, which is valuable on such soils as would be improved by the use of land plaster, and if prepared from bone also contains nitrogen, which gives it an additional value.

POTASH

Potash is found in greater or less quantity in all soils. It is essential to the development and growth of the plant. In combination with Nitrogen and Phosphoric Acid, Potash contributes to the full and perfect development of plants. Excess of Potash does not show any special effect on the plant, but a weakened growth, a lack of fruitfulness, and especially a slow and unsatisfactory development of starch and woody fiber, **follows its deficiency in the soil.**

LIME

Lime is not a direct fertilizer but improves the condition of swampy and peaty soils, which consists largely of organic matter and are consequently rich in nitrogen, but this nitrogen is unavailable, owing to the slow decay of the organic matter in some of these soils, so lime furnishes the conditions necessary for a more rapid decay. Such soils sometimes need phosphoric acid and potash as well as lime.

Lime also performs a valuable office in the sweetening of soils. When a soil betrays excess of acid, lime is needed. It also makes heavy clays light and more porous, and renders the plant food in them as well as in muck soil more available. Quick-lime, marl and ground oyster shells are the more common sources of lime. To produce the results above noted lime from stone or oyster shells is more effective.

A 100-Pound Bag of High Grade Commercial Fertilizer will contain more soluble and available plant food than 4,000 pounds (two tons) of stable manure of average quality. How much easier and cleaner to handle one 100-pound bag than two tons of manure, and there are no weed seeds to worry over. Always remember that the commercial value depends upon the available or soluble contents of a mixed fertilizer, and the price is governed thereby. The figures giving the soluble, insoluble, totals, etc., unless understood, are often misleading, apparently giving a greater percentage of the various elements than are actually available.

NOTE—As Fertilizers are sold on a small margin, prices are subject to market changes, but you will always get FULL VALUE for your money.

HIGH GRADE FERTILIZERS—Continued

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

VEGETABLE FERTILIZERS

This is an all-round fertilizer, which can be used on any crop. It is used quite extensively by our leading market gardeners, and we recommend it very highly for the garden and farm crops. Use 5 pounds 100 square feet.

Analysis: Nitrogen 4.13 per cent; Phosphoric acid 8.25 per cent; Potash 3.50 per cent.

Quantity per Acre

Vegetables and berries -----400 to 600 lbs.
Grain -----300 to 400 lbs.

Price: 10 lbs., 55c; 100 lbs., \$3.25.

FRUIT AND ONION FERTILIZER

This fertilizer is also used for Raspberries, Blackberries, etc. We sell large quantities for growing the famous Puyallup Valley Raspberries and Strawberries. Analysis: Nitrogen, 3 per cent; Phosphoric Acid, 8 per cent; Potash, 9.50 per cent.

10 lbs., 55c; 100 lbs., \$3.35.

Diamond Lawn and Rose Fertilizer

It promotes a vigorous and healthy growth, giving the desired dark rich green appearance, it can be applied at the time the seed is planted and later as a top dressing; one hundred pounds is sufficient for an ordinary city lot, and is far more effective and less objectionable than stable manure. Remember it contains no weed seeds. When used as a top dressing it is best to make several light applications about two weeks apart. Use 5 pounds to 100 square feet. Price: 10 lbs., 55c; 100 lbs., \$3.35.

TANKAGE

Ground meat scraps and bone, dessicated in a vacuum, is very rich in phosphoric acid and nitrogen. Use 5 pounds to 100 square feet; per acre, same as General Fertilizer. Price: 10 lbs., 55c; 100 lbs., \$3.50.

SHEEP GUANO

Pure pulverized sheep manure is the most nutritious of the animal fertilizers. It promotes steady and rapid growth. We recommend it very highly for use in green-houses, as well as for garden purposes.

USE—For Flowers, Roses and Lawns, apply at any time—just prior to growing season being preferable—using at the rate of one ounce to the square foot.

Price: 10 lbs., 30c; 100 lbs., \$1.75.

BONE MEAL

Fine ground, is one of the best fertilizers. This is the only grade of Bone Meal, and is reduced by improved machinery to an even fineness—nothing is added. This is a very valuable enricher of the soil, and one of the most economical at present prices. Price: 10 lbs., 55c; 100 lbs., \$3.35.

NITRATE OF SODA

For immediate results Nitrate of Soda is the very best for stimulating and forcing the growth of plants or any other crop. Use one pound to a ten-quart pail of water. Apply this in small amounts some little distance from the plant. Repeat in from twenty to thirty days. Price: 10 lbs., 59c; 100 lbs., \$4.00.

SUPERPHOSPHATE

This is a concentrated form of phosphoric acid, and it is actually the cheapest form in which to buy phosphoric acid. Our present stock contains 17 to 18 per cent. available phosphoric acid. Price: 10 lbs., 30c; 100 lbs., \$2.15.

GROUND LIME ROCK

This is the best form of lime for sweetening sour soil. It is fully as effective as air-slacked lime, is more convenient and less expensive. Price: 100 lbs., \$1.00; ton, \$15.00.

HYDRATED LIME

Effect on Soils

Lime acts both as a direct and indirect fertilizer. It so "fixes" the potash and phosphoric acid of the soils that there is little loss. It hastens the decomposition of either barn or green manure by increasing bacterial activity. It improves the drainage by "coagulating" the soil particles, making clayey soils open and loose, makes sandy soils more compact, thus conserving the moisture, and this naturally tends to make a WARMER soil than the soil deficient in lime. Warm soils mean quicker growth and earlier ripening of fruits and vegetables. **EARLIER MARKETS and MORE MONEY.**

Hydrated Lime in bags only of 87 lbs.

Price each, \$1.35; ton, \$26.00.

MURIATE OF POTASH

Contains a larger percentage of actual Potash than other commercial forms and is therefore, cheaper where it can be safely used, but owing to the Chlorine contained, is not best for some crops unless applied a few months previous to planting, which allows the Chlorine to leach out while all of the actual Potash is retained until taken up by the plants. Lb., 5c; 100 lbs., \$4.00.

SULPHATE OF POTASH

Contains no Chlorine, can be used on any crop requiring Potash and is especially adapted for mixtures, being in the form of a dry powder. It is also the best form of Potash for heavy soils. Lb., 6c; 100 lbs., \$5.00.

**WRITE US FOR SPECIAL PRICES ON LARGE QUANTITIES
FERTILIZER, IF GOOD, IS A REAL INVESTMENT NOT AN EXPENSE**

STIM-U-PLANT

PLANT STIMULANT TABLET

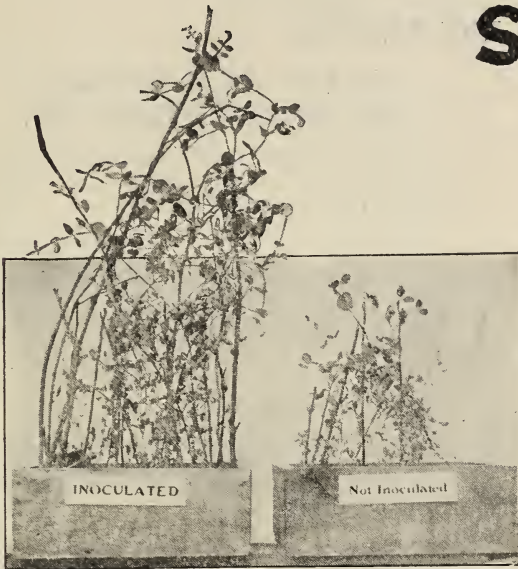
Trade Mark Registered U. S. Patent Office

PLANT FOOD IN TABLET FORM

The most efficient and Scientific method of fertilizing all kinds and conditions of growing plants in home garden, house or farm.

STIM-U-PLANT is a 26 grain tablet with a guaranteed analysis of 11 per cent nitrogen; 12 per cent phosphoric acid and 15 per cent potash.

No other plant food contains anything like as high an analysis as this. **Stim-U-Plant Tablets** are composed of water soluble materials of great feeding power and of known weight and percentage of plant food.



STIM-U-PLANT Tablets should be used directly in the soil at the base of the plants or dissolved in water and applied to the soil. Do not spray the foliage. No matter how rich the soil may be, these wonderful little tablets will help the plants along.

STIM-U-PLANT Tablets are packed in four sizes:

Trial Size	15 cents, containing	10 Tablets
Small Size,	25 cents, containing	30 Tablets
Medium Size,	75 cents, containing	100 Tablets

Legume Inoculation HUMOGERM

A SEED and SOIL INOCULANT

THAT INCREASES CROP PRODUCTION AND GREATLY IMPROVES THE SOIL



Roots like this mean bigger yields — better Soil

Crop and soil experts agree that for best growth, and to put atmospheric nitrogen in the soil, it will pay all farmers to inoculate all legumes, even where they are at present successfully grown. The cost is trivial when compared with the profit it will bring you. Legumes are clovers, peas and beans, alfalfa, soy beans, vetches, and other plants that grow their seeds in a pod. Their roots are the home of bacteria that draw fertility-building nitrogen from the air and store it in swellings on the roots, called nodules. These nodules not only feed nitrogen to the crop they are on, but rot away in the ground and supply valuable nitrogen to the soil for future bumper crops of corn, wheat, cotton, oats, fruits, etc.

HUMOGERM Is Economical and Easy to Use

Humogerm carries the nitrifying bacteria in a porous humus medium which acts as a natural home for them—keeps them fresh, active and vigorous. The ventilated cans are friction top and open easily without cutting.

Place seed in pile, moisten slightly with water and a little sugar, pour on HUMOGERM, and plant in usual way. This gives thorough inoculation, and is cheaper, safer and better than the discredited, laborious soil transfer method.

How to Order

Specify crop and number of bushels you wish to inoculate. The can unit designations are on the bushel basis; for instance, the 1 bu. size contains sufficient culture to thoroughly inoculate 1 bu. of legume seed, any variety.

Special garden size for peas, beans and sweet peas, 25 cts. You will be delighted with the fine results. **Prices:** ¼-bu., 35c; ½-bu., 60c; 1-bu., \$1.00. 2½-bu., \$2.25.

When more than one bushel of seed is planted to the acre, the 1 bu. size contains sufficient inoculation for the amount of seed planted on one acre.

ST. HELENS INCUBATORS

60-(70) EGG SPECIAL
ST. HELENS INCUBATOR

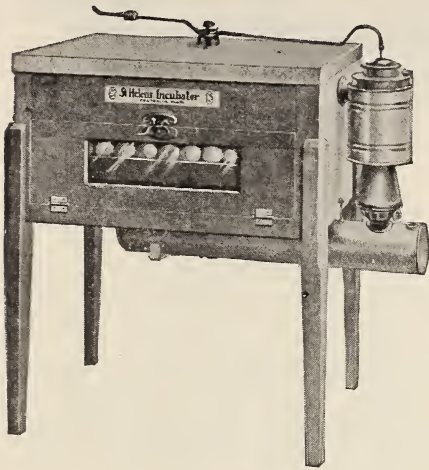
Double Walled, Hot water heated, copper tank and heater, safety lamp, chick nursery, self regulating.

This little hatcher is high grade and is constructed with heavy double, red cedar case and double top with felt insulation. Tank and heater is of best grade cold rolled copper of same pattern as used on the large incubators.

Weight, crated, About 45 lbs.

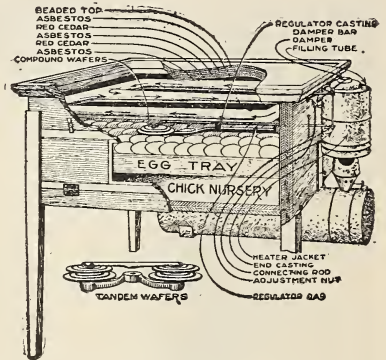
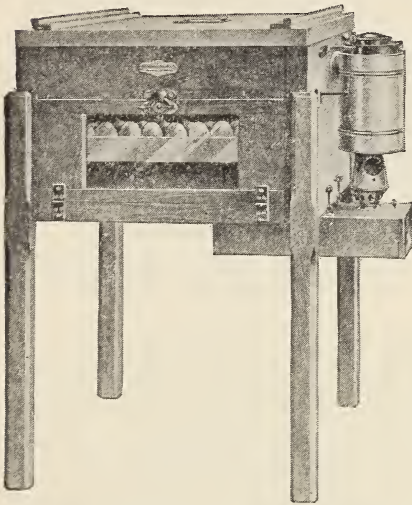
Price complete, \$12.50.

Above furnished all complete with safety lamp, tested thermometer, egg tester, egg tray, heat regulator and complete instruction book.



130-(140) EGG

ST. HELENS INCUBATOR



Floor space required, 2 feet 9 inches by 2 feet 3 inches. Equipment: Large steel oil tank, safety burner and chimney, one egg tray, one removable chick nursery tray, one tested incubator thermometer, one egg tester, complete heat regulator attached, two temperature charts and complete instruction book.

Weight, crated ----- 100 lbs.

Price ----- \$24.50

It makes no difference whether you buy the 130-egg Incubator or any of the larger sizes, they are all constructed and fitted exactly alike and will do the same good work. For the beginner and small poultry raiser the 130-(140) egg incubator is an ideal hatcher. This is also an excellent machine to use as tender with the larger incubators. Start both at the same time and then when the infertile eggs are tested out you can generally fill the large incubator completely full of fertile eggs to finish the hatch and then start this small incubator with another incubator as tender and make double use of it.

I have one of your incubators which has been in use since 1906 and is still giving good satisfaction.
LE ROY MASSEY, Wallace, Idaho.

ST. HELENS ELECTRIC INCUBATORS

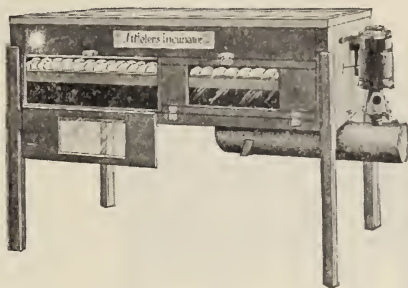
Floor space required, 2 feet 9 inches by 4 feet.

Equipment: Large steel oil tank, safety burner and chimney, two egg trays with removable racks, two removable nursery trays, one tested incubator thermometer, one egg tester, turning racks, complete heat regulator attached, two temperature charts and complete instruction book.

Weight, crated, 160 lbs.

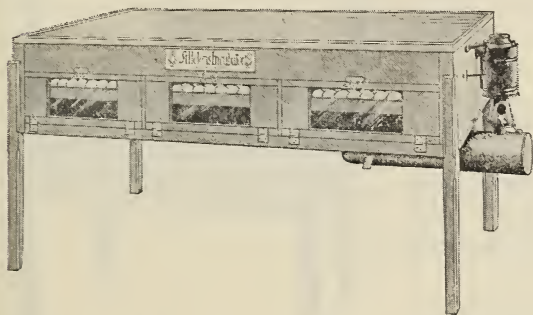
Price for 260 to 280, \$38.00.

Complete incubator catalogue sent on request.



260-(280) EGG ST. HELENS INCUBATOR

Each of the latest improved model St. Helens Incubators of 130 eggs and larger, are fitted with our removable egg tray rack. This is a great convenience and a new idea found only in a St. Helens Incubator. It enables you to tray up the eggs in a convenient method and makes the turning very easy and quick.



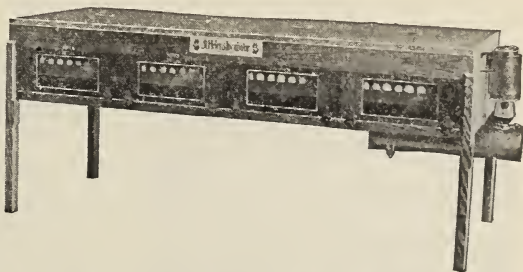
330-(420) EGG ST. HELENS INCUBATOR

Equipment—Large steel oil tank, safety burner and chimney, four egg trays fitted with removable egg racks, four removable chick nursery trays, one tested incubator thermometer of best make, one egg tester, four turning racks, complete heat regulator attached, two temperature charts and complete instruction book.

Floor space required, 2 ft. 9 inches by 7 ft.

Weight, crated, 250 lbs.

Price for 520 to (560), \$62.50.



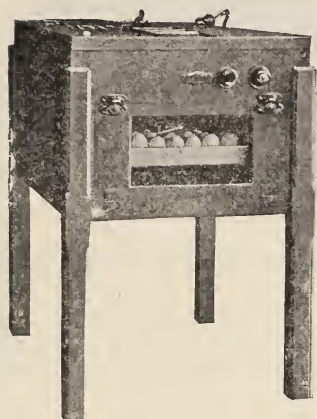
520-(560) EGG ST. HELENS INCUBATOR

The latest improved 1923 model 560-egg incubator is an ideal incubator for baby chick hatcheries and the larger poultryman. The large steel oil tank eliminates the filling of the lamp every day, which is the case with the small founts furnished with most incubators.

It has adjustable sash locks, compound top, metal fireproof ends outside the regular double wood ends, making an extra warm air insulated space; also metal bound top and deeper egg chamber. The finest constructed hatcher that we have ever manufactured.

NONE BETTER AT ANY PRICE

ST. HELENS ELECTRIC INCUBATORS



130-(140) EGG

ST. HELENS ELECTRIC INCUBATOR

Floor space required, 31 in. by 22 in. Furnished complete ready to operate, with tested thermometer, electric egg tester, egg tray, turning rack, nursery tray, pilot light extension cord and plug, and complete instruction book.

Weight, crated, 110 lbs.

Price for 130 egg size, \$35.00.

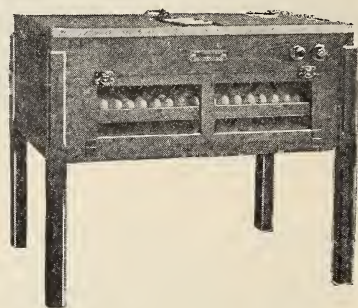
260-(280) EGG

ST. HELENS ELECTRIC INCUBATOR

Floor space required, 31 in by 41 in. Equipped complete ready to operate with tested thermometer, electric egg tester, two egg trays with turning racks, two nursery trays, pilot light, extension cord, and complete instruction book.

Weight, crated, 170 lbs.

Price for 260-(280) egg, \$50.00.



520 to 560 EGG

DOUBLE DECK ST. HELENS ELECTRIC INCUBATOR

Floor space required, 31 in. by 41 in. Equipped the same as the 260-egg single deck as listed above. This shows the method of double-decking to save space.

We can also furnish longer legs for triple-decking when so ordered

When either double or triple decks are used they are furnished with connections for one drop cord and all decks operated from the same socket.

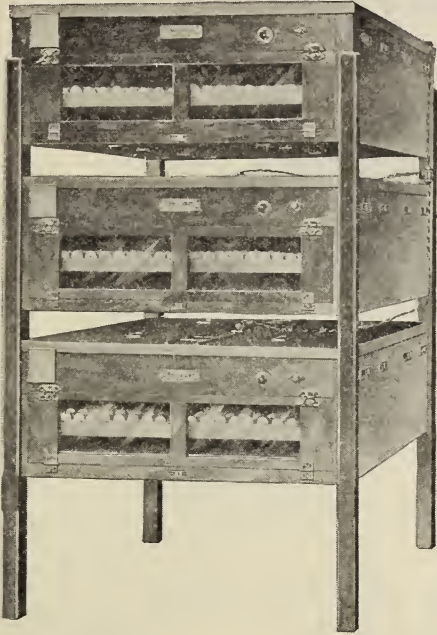
Weight, crated, 340 lbs.

Price for 2-Deck, \$100.00.



NOTE We believe that the St. Helens Electric and Oil operated Incubators are the best investment you can make for either price or hatch. Try one.

ST. HELENS ELECTRIC INCUBATORS



THE THRE-DECK ELECTRIC MAMMOTH

Total egg capacity from 1560 to 1680 in floor space only 61 in. by 41 in.

Three Deck, weight crated, 1050 lbs.
Two Deck, weight crated, 700 lbs.
One Deck, weight crated, 350 lbs.

PRICES

Three Deck,	\$255.00
Two Deck	\$170.00
One Deck	\$ 85.00

Capacity each Deck 520 to 560 eggs.

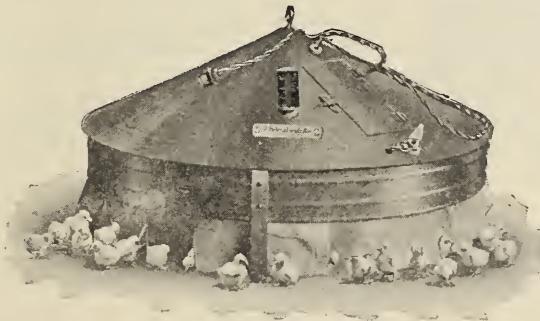
NOTE—For the man who wants to increase his capacity for hatching from year to year this is the finest and most economical method as it saves extra investment in additional buildings for incubation.

WRITE FOR SPECIAL DESCRIPTIVE CATALOG

BROODERS

Latest Improved St. Helens Electric Brooder

Through my double spider-web coil system in wiring this brooder, the heat is distributed evenly from outer edge to center and there is no Hot Spot or incentive for the chicks to crowd.



On a three cent heating rate this brooder can be operated cheaper than an oil stove. The No. 2 brooder can be operated for about 7c for 24 hours when filled with 200 chicks.

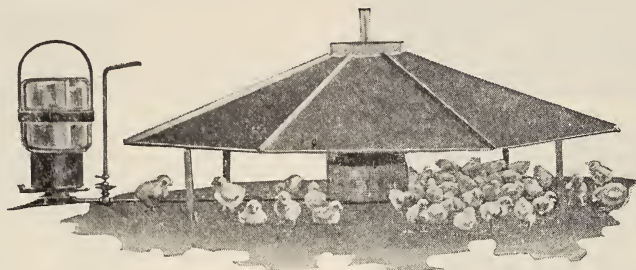
Regularly wired for 110 Volt. Special Order for 32 Volt

Furnished all complete with extension cord, felt yard, complete heat regulator attached, thermometer and pilot light and instruction sheet on operating brooder and feeding the chicks.

No. 2—32 in., 200-Chick Electric Brooder	-----	\$20.00
No. 3—42 in., 350-Chick Electric Brooder	-----	27.50
No. 4—52 in., 500-Chick Electric Brooder	-----	35.00
No. 5—60 in., 750-Chick Electric Brooder	-----	47.50

WE BELIEVE THIS TO BE THE MOST ECONOMICAL BROODER ON THE MARKET

LATEST IMPROVED "PERFECTION" BLUE FLAME OIL BURNING BROODER STOVE



New Patented Direct Oil Feed, no danger of stoppage of oil flow, blaze will never go out. Adjustable, glass oil reservoir regulates size of blaze. One gallon common coal oil operates largest size for 24 hours. Burner and generator all metal, no asbestos wick to burn out. Constant even heat day and night, most reliable and cheapest to operate of any brooder stove. Can be used in most any kind of a tight properly ventilated room if you do not care to build a regular brooder house. This oil burning brooder stove will give a constant even heat and for that reason gives better results and with much less attention than any coal burning stove. Cap is provided with a gas tube that will carry out any fumes that might accumulate.

Made in three sizes, from 100 to 600 chicks without crowding

No. 2—32-inch canopy, 200-chick size, weight 35 lbs.	\$17.00
No. 3—42-inch canopy, 400-chick size, weight 50 lbs.	20.00
No. 4—52-inch canopy, 600-chick size, weight 65 lbs.	23.00

"PERFECTION" COAL BURNING BROODER STOVE

Burns coal, coke, brickettes or gas. I believe this to be one of the best colony coal burning Brooder Stoves that is on the market. Heavy cast iron body and grates and adjustable metal canopy. Fitted with automatic heat regulator that works on the dampers. Large fire pot that when filled with good grade of coal will last all night. These stoves are generally rated 1000 to 1200 for the latter size and 600 to 800 for the small one, but my idea is that this, as well as most brooder stoves, is overrated. Place about 600 or 800 under the 52-inch size and about 400 under the 42-inch size will give you the best results. A room with low ceiling and about 14x14 feet for the larger stove and about 12x12 feet for the small stove would be about the ideal size. However, most any room could be made use of.

52-inch Coal Burning Brooder Stove, weight 117 lbs.	\$27.50
42-inch Coal Burning Brooder Stove, weight 95 lbs.	24.50

Please note, these stoves are much heavier casting than the common cheap stove made to sell at a lower price.

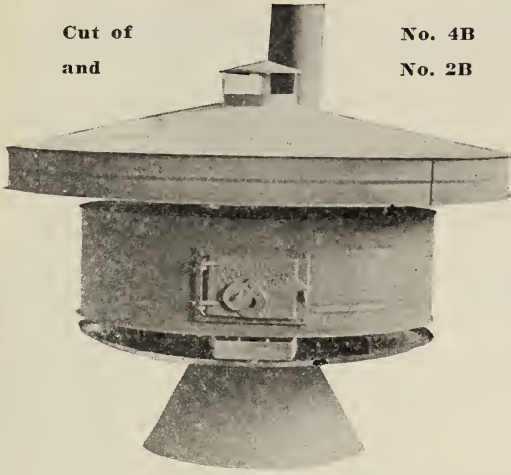
The stovepipe is extra, but all other equipment is included as shown in the picture. Three-inch pipe in 24-inch lengths, 30c each.

The 52-inch stove will hold 38 lbs. of coal, and the 42-inch size, 23 lbs.

"PERFECTION" ELECTRIC HOVER

Capacity 50 to 100 Chicks. 22 in. Diameter. Price only \$4.75.

BROODERS

PRIDE OF PETALUMA VENTILATING BROODER STOVES
(Kresky)Cut of
andNo. 4B
No. 2B

The stoves that get results regardless of the weather, because it provides plenty of **FRESH, WARM AIR**, constantly for the chicks. Never goes out—proper draft control. Pride of Petaluma Brooder Stove has large radiating surface, and radiates heat to the floor where the chicks are. Maintains even temperature, automatically controlled and can be depended upon during stormy weather, as it heats and cools off quickly.

No. 4B Stove, 1500 Chicks Capacity, without pipe, Price \$59.50.

No. 2B Stove, 1000 Chicks Capacity, without pipe, Price \$57.00.

THE No. 2 COMB. CANOPY

Stove is becoming one of the most popular stoves on account of its great economy in fuel costs. In fact all Kresky Stoves enjoy the highly appreciated feature. In the cut at right notice how the heat is radiated to the floor, on the backs of the chicks. This stove can be used as shown or we can supply 8-ft. or 10-ft. canopies as desired.

No. 2 Stove only, without stove pipe, Capacity 800 Chicks. Price \$42.00.

No. 2 Stove as above with 8-ft. canopy, 600 to 1500 Capacity. Price \$50.00.

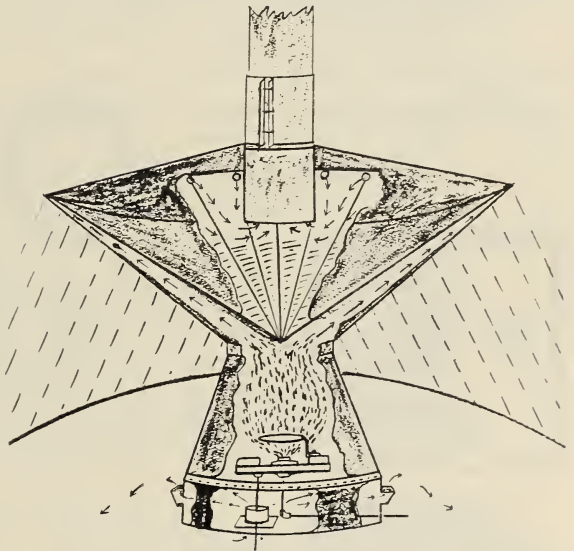
No. 2 Stove as above with 10-ft. Canopy, 700 to 1800 Chicks. Price, \$55.00.

No. 12A Brooder Stove, 300 to 1000 Capacity. Price \$49.50.

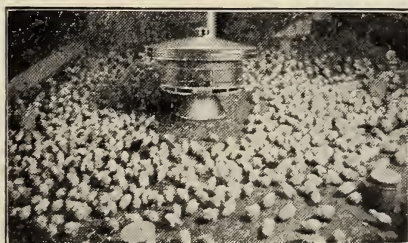
NOTICE—Stove pipe combinations as follows:

- 1 joint Galv. pipe 5x20 inch.
- 1 joint Galv. pipe 5x24 inch.
- 5 joints Black pipe 5x24 inch.
- 1 Saddle or Roof Plate for 5-inch pipe.
- 1 Hood (outside of Roof) 5-inch pipe.
- 1 Ceiling Plate.

Price for above complete is \$8.00.

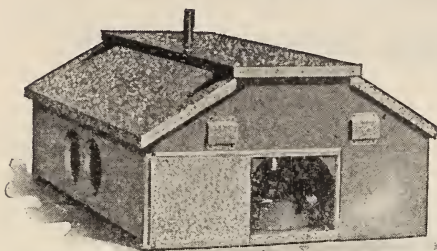


The purchaser of **PRIDE OF PETALUMA** Brooder Stove who will co-operate with us in selection of a rightly built and ventilated Brooder House, and proper stove installation, can be reasonably assured of a highly satisfactory means of brooding Baby Chicks.



**Send for
Special
Brooder
Stove Catalog with
Plan of
Brooder
Houses.**

BROODERS AND OAT SPROUTERS



ST. HELENS "PERFECTION" BOX BROODER

MADE IN THREE SIZES

Furnished complete with O. K. Saftey Lamp, Thermometer, Chick Fount and Instruction sheet.

60-Chick "Perfection" Brooder	\$ 7.50
120-Chick "Perfection" Brooder	11.50
240-Chick "Perfection" Brooder	17.50

CHEAP FEED AND HOW TO PRODUCE IT

Our "PROGRESSIVE" METAL GRAIN SPROUTER is now made in two sizes, the one illustrated being large enough for a flock up to 500 hens, and then we have a double "Progressive" Sprouter with capacity for 1500 hens or less, sprouting over three times as much as the one illustrated.

Be sure to secure good new heavy oats, as much of your success in sprouting will depend on the oats you use. Soak the oats from twelve to twenty-four hours, and for this purpose we supply the latest improved "PROGRESSIVE" sprouter with a soaking tank at the top. The picture shows the soaking tank inverted in the act of dumping the soaked oats into the top section.

The surplus water in the soaking tank as you empty each time will drain down through each section, remoistening the lower sections of oats, and then drain out through a small pipe in the bottom.

These sprouters are made from galvanized steel and will last for years.

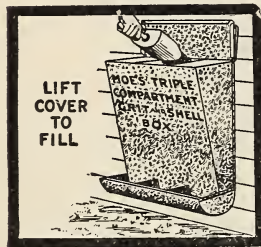
"PROGRESSIVE" Sprouter, like cut, 500 hens ----- \$18.00

Double "PROGRESSIVE" Sprouter, 1500 hens size ----- 42.00



MISCELLANEOUS POULTRY SUPPLIES

MOE'S SANITARY SELF-FEEDING BOXES



Made of heavy galvanized iron; soon pays for itself in preventing waste of feed. For keeping grit, shells and charcoal before the fowls at all times. 3 compartments. Weight, 2½ lbs. Price, \$1.10.

MOE'S GALVANIZED IRON DRINKING FOUNTAINS

Our galvanized Iron Drinking Fountains embody every good feature of the down-to-date drinking fountains, and we believe, are the best in use. They are easily filled, cleaned and kept clean. If placed in the shade in Summer time, the water will keep nearly as cool as in an earthen vessel.

They are much lighter than the earthenware fountains and are safer to ship. A dozen can be put in compact package for shipment, as they nest together. We offer them at a very low price.

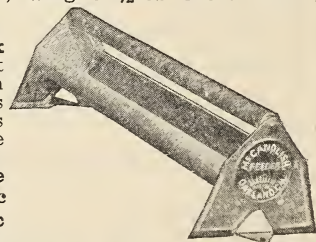
Large size; about 1 gallon; Weight 1½ lbs. Each 75c.

STAR SANITARY FOUNTAIN AND FEEDER

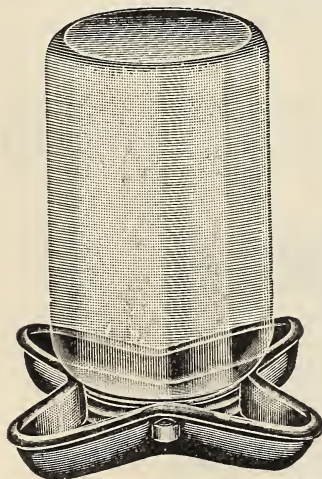
For water, grit, chick food or grain, using ordinary Mason jar, either quart or half gallon. Has galvanized pan that is quickly detachable. The best fountain of this type. Price, one size only, without jar, weight ½-lb each. Each, 10c; doz., \$1.10.

McCandlish Improved Chick Feeder is the latest and most practical young chick feeder on the market. The top bar as shown in cut revolves so chicks are unable to stand on it. Made in three sizes:

	Price
12-in -----	40c
20-in. -----	50c
30-in. -----	75c



McCANDLISH IMPROVED CHICK FEEDER



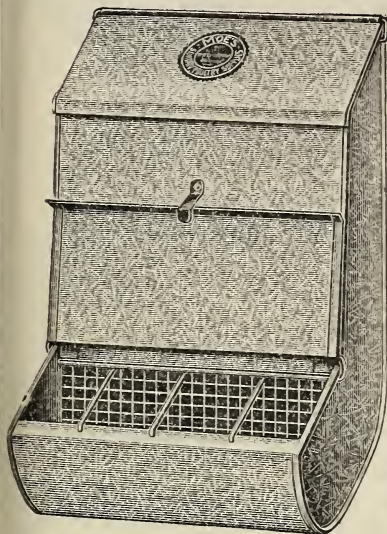
STAR FOUNTAIN AND FEEDER



REPLACE DRINKING PAN.
TURN OVER READY
FOR USE

MISCELLANEOUS POULTRY SUPPLIES—Continued

MOE'S DRY MASH HOPPER



A dry mash hopper of great merit, made of heavy galvanized iron. The curved bottom keeps the feed within easy reach of the birds and taper shape of hopper, prevents feed from clogging.

No. 36—12 in. wide, 19 in. high. Capacity 14 qts. Price, each \$2.25.

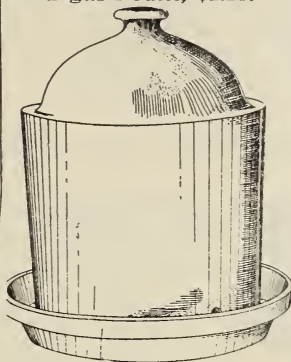
No. 37—24 in. wide, 19 in. high. Capacity 32 qts. Price, each \$3.10.

CROCK FOUNTS FOR WATER OR BUTTER—MILK—3 SIZES

½-gal. Fount 60c.

1-gal Fount, 75c.

2-gal Fount, \$1.25.

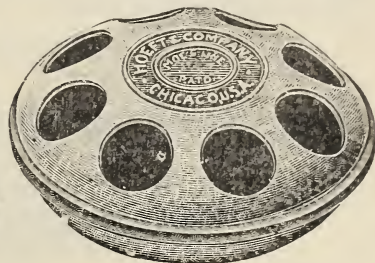


MOE'S ROUND BABY CHICK FEEDERS

Can be taken apart easily for filling or cleaning.

No. 11—6 in. with 8 holes. Price Each, 15c; Per doz., \$1.65.

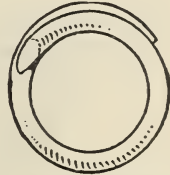
No. 12—8¼ in. with 12 holes. Price Each 25c; Per doz., \$2.75.



BABY CHICK



MEDITERRANEAN



AMERICAN

SPIRAL COLORED LEG BANDS—Made like a key ring—easy to put on, nothing to catch or tear off—instantly identifies your birds as far as you can see the color. All sizes from chick to mature fowls. **Ten colors**—Red, White, Yellow, Black, Pink, Green, Brown, Purple, Light Blue, Dark Blue. **Prices, postpaid, 12 for 15c; 25 for 25c; 50 for 40c; 100 for 65c.**



Leader—Latest and best adjustable leg band out. Has neat, compact, and smooth fastening, with no catching points; easily attached and is absolutely secure. **Prices, postpaid, 12 for 15c; 25 for 25c; 50 for 40c; 100 for 65c.**



CHINA NEST EGGS

Best grade Opal Eggs. Weight, per doz., ¾-lb. Price, doz., 40c.

ELECTRIC EGG TESTER

Attach to any regular lamp socket and you can test your eggs in two or three days after incubation when the infertile eggs are still good to eat.

Price \$1.75.

PETTY'S POULTRY PUNCH

Latest, most convenient Poultry Punch; can be put on a key ring or used for a watch charm. Will not clog. Thoroughly practical. **Price, postpaid, 25c.**

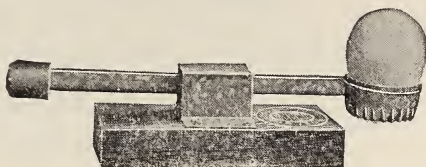
EGG TESTERS

X-Ray—This egg tester is made to use on a lamp and will fit the ordinary No. 2 burner; very convenient and good. **Price 50c.**

MISCELLANEOUS POULTRY SUPPLIES—Continued

POWDER GUNS

Jumbo—Very economical for using insect powder of any kind. **Price, 25c; postpaid, 30c.**



EGG SCALE

A well constructed, accurate and reliable Egg Scale at a very nominal price. They are of the 22 oz. and 19 oz. types, or in other words for first grade and pullet eggs. Each one is intact initself. **Price, 55c; Postpaid, 60c.**

LAMP BURNERS

No. 2 O. K. Safety Burner and Wick, **65c.**

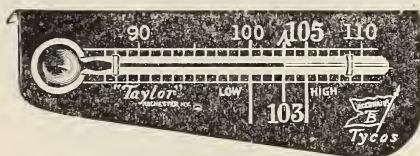
No. 3 O. K. Safety Burner and Wick, **80c.**

CHIMNEYS

No. 2 Metal Chimney for incubator. Size 3-inch. **Price 35c.**

No. 3 Metal Chimney for incubator or brooder. Size 5 or 7 in. **40c.**

Thermometers for Incubators



No. 5774 Tycos—Triangle shape metal back, "tested." **Price, 90c.**

No. 5782 Tycos—Triangle shape metal back, best incubator thermometer made, certified correct; worth the additional cost. **Price \$1.15.**

No. 5770 Tycos—Triangle shape metal "tested." **Price, \$1.00.**

No. 5770 Tycos—Straight metal back. Petaluma Incubators. "Tested." **Price \$1.00.**

FOR BROODERS

No. 5794 Tycos—Straight metal back. Price ----- **60c**

No. 5790—Wood back, nice finish. "Tested." Price ----- **\$1.50**

St. Helens Brooder Thermometer—Wood back, Price----- **75c**

MISCELLANEOUS POULTRY FOODS

BEEF SCRAPS

1 lb., 5c; 25 lbs., \$1.65; 50 lbs., \$3.40;
100 lbs., \$5.50.

BONE GRANULATED

1 lb., 5c; 25 lbs., \$1.00; 50 lbs., \$1.90;
100 lbs., \$3.50.

BONE MEAL

1 lb., 5c; 25 lbs., \$1.00; 50 lbs., \$1.90
100 lbs., \$3.50.

CHICK FOOD

Special prepared food for baby chicks.

1 lb., 5c; 25 lbs., \$1.15; 50 lbs., \$1.95 100
lbs., \$3.55.

SCRATCH FOOD—Special Mixed

1 lb., 5c; 25 lbs., 90c; 50 lbs., \$1.50; 100
lbs., \$2.80.

BLOOD MEAL

Per lb., 5c; 25 lbs., \$1.40; 100 lbs., \$5.50.

DRIED BUTTERMILK

Per lb., 15c; 50 lbs., \$5.75; 100 lbs., \$11.00

CHARCOAL GRANULATED

1 lb., 6c; 25 lbs., \$1.25; 50 lbs., \$2.25;
100 lbs., \$4.50.

POULTRY PEPPER

Per lb., 20c; 5 lbs., 90c.

OYSTER SHELL

Per lb., 2½c; 50 lbs., \$1.15; 100 lbs., \$2.00

GRIT "LIMESTONE"—Fine and Coarse
for hens and chicks.

Per lb., 2c; 100 lbs., \$1.45.

OIL CAKE MEAL

Per lb., 5c; 50 lbs., \$1.90; 100 lbs., \$3.75.

SUNFLOWER SEED—For Feed Purpose

Per lb., 15c. Quantities, special prices.

LACTEIN FOR POULTRY

Lactein is a condensed milk product, made from buttermilk, skim milk and whey, blended together, pasteurized and the lactic acid bacteria bred or developed to their very highest degree before the product is condensed by a special process, which retains all the health giving food and tonic values, without the useless bulk of water.

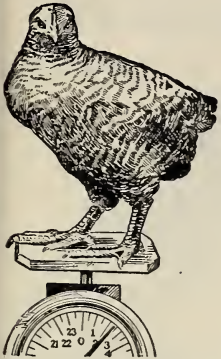
One gallon of Lactein when diluted with water makes thirty gallons of feeding solution, enough to feed 1000 hens two days or 100 hens 20 days.

Lactein fed with grain food makes a complete, correctly balanced egg-producing and body-building ration—feeding high-priced grain which fails to produce the maximum of eggs is a loss, but if **Lactein** is added you are assured a profit.

Lactein is put up in wooden barrels of 5, 10, 25 and 52 gallon sizes.

Prices: 5 gallons, \$4.25; 10 gallon keg, \$7.75; ½-bbl., \$17.00; bbl., 52 gal., \$30.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



21 1/4 lbs. at 8 weeks!
Trade Mark
Reg. U. S. Pat. Off.

BLATCHFORD'S CHICK MASH

BLATCHFORD'S Chick Mash is the favored starting and growing feed of the most prominent poultry-raisers in the country. It contains all the feeds and nutriment chicks need **right from the start**. It shields them from white diarrhea, bowel trouble and leg weakness. It does not force, but, by supplying proper nourishment to each and every part of the body, promotes steady and complete development in the shortest possible time. It contains no screenings, hulls or cheap by-products from the manufacture of breakfast foods, cereal foods or scratch grains. It carries chicks **all the way**—starts, grows and matures—without change of feed.

10-lb. package, 80c; 25-lb. sack, \$1.65; 100-lb. sack, \$6.10.

Blatchford's "Fill-the-Basket" Egg Mash

THE STANDARD OF PERFECTION IN EGG MASHES

Blatchford's "Fill-the-Basket" Egg Mash is built upon the principle that the hen is an egg-making factory and that eggs are *manufactured* from the feed she receives. Consequently, her feed must be rich in materials required for egg-production. Scratch grains alone are not sufficient. They will maintain the hen's life, but *surplus* nourishment is absolutely necessary if she is to yield her maximum of eggs. Blatchford's Egg Mash successfully solves the problem of securing eggs both winter and summer. Every bag guaranteed to give satisfaction.



TRADE-MARK

25-lb. sack, \$1.35; 100-lb. sack, \$4.65.

REGISTERED



Good to the last drop

BLATCHFORD'S CALF MEAL

FIRST ON THE MARKET—FIRST IN QUALITY—FIRST IN RESULTS

Blatchford's Calf Meal raises calves from babyhood. It is extremely palatable. It is easy to feed. It saves both milk and money. It will pay you to use it.

25-lb. sack, \$1.75; 50-lb. sack, \$3.25; 100-lb. sack, \$6.25.

BLATCHFORD'S PIG MEAL

CARRIES PIGS SAFELY THROUGH THE CRITICAL WEANING PERIOD

This smooth, soluble meal is in composition as near like the sow's milk as it is possible to get it. It contains just the right percentage of vegetable protein, fat, etc., in correctly diversified form to grow bone and muscle. Little pigs relish it and thrive upon it. It "makes the runts catch up." A trial will convince you that it is to your advantage to use this economical milk-equal.

25-lb. sack, \$1.75; 100-lb. sack \$6.25.



POULTRY AND STOCK FOODS AND REMEDIES, ETC. CONKEYS

CONKEY'S LAYING TONIC

It will insure the maximum egg production. Guaranteed to please you or money back. Prices: 2 lbs., 30c; 4 lbs., 60c; 7 lbs., \$1.20; 25-lb. pail, \$3.50.

NOTE—Weights, wrapped for mailing.

CONKEY'S LICE POWDER

Prices: 15-oz. pkg., 30c; 48-oz. pkg., 60c.

NOTE—Weights not wrapped for mailing.

CONKEY'S LIQUID LICE KILLER

Prices: 1 qt. can, 60c; 2 qts., 90c; 1 gal., \$1.50.

CONKEY'S HEAD LICE OINTMENT

Save your little chicks from the ravages of the deadly head lice. Absolutely harmless to the little chicks. Put up in tubes; easy to apply. Price: Per tube, 35c, postpaid.

CONKEY'S WHITE DIARRHOEA REMEDY

Save your chicks by putting it in their drinking water. Prices: 30c; 60c and \$1.20.

CONKEY' 50c POULTRY BOOK—FREE

Conkey's 72-page Poultry Book, contains 60 pages on FEEDING, CARE and HOUSING of POULTRY.

Limber Neck Remedy, 60c postpaid.

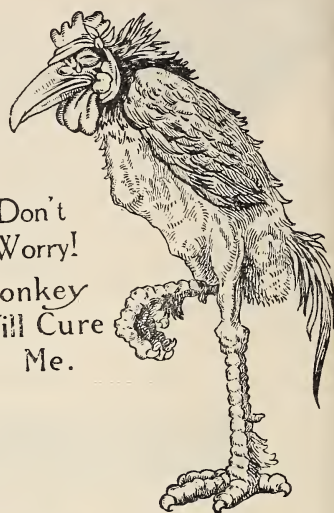
Sealy Leg Remedy, 30c postpaid.

Rheumatic Remedy, 70c postpaid.

Poultry Worm Remedy, 60c postpaid.

Sulphur Candles (fumigating), 10c, 15c postpaid.

Nox-I-Cide—Best disinfectant. Prices: pint, 50c; quart, 80c.



Don't
Worry!
Conkey
Will Cure
Me.

CONKEY'S ROUP REMEDY

It kills the disease germs, invigorates the bird and restores your profits. Your money back if it doesn't please you. Three sizes, 30c, 60c, \$1.20 postpaid. 60c size makes 25 gallons of medicine.

Bronchitis Remedy, 60c postpaid.

Blackhead Remedy, 60c postpaid.

Cholera Remedy, 30c and 60c postpaid.

Gape Remedy, 30c and 60c postpaid.

CARBOLINEUM

The famous wood preserver and insecticide. Paint or spray your chicken house, hog pens, stables, sheds, etc., with Carbolineum to permanently destroy all poultry and other vermin and preserve your buildings from rot and decay. Price, quart can, 50c; 1 gallon can, \$1.70; 5 gallon can \$8.00.

DR. HESS

DR. HESS PAN-A-CEA

Is one of the best tonics on the market for increasing the egg yield and keeping your poultry in fine condition. Prices: 1½-lb. pkg., 30c; 3 lbs., 60c; 7 lbs., \$1.25.

DR. HESS INSTANT LICE KILLER

Price: 1-lb. pkg., 30c.

DR. HESS ROUP REMEDY

Price: 50c.

DR. HESS STOCK TONIC

Is a scientific compound, for horses, cattle, hogs and sheep. Prices: 2-lb. pkg., 35c; 7 lbs., 75c; 12 lbs., \$1.50.

DR. HESS HEAVE CURE

Price: 1½-lb. pkg., 50c.

DR. HESS WORM POWDER—For Stock

Price: 1½-lb. pkg., 50c.

You can get one of Dr. Hess Poultry or Stock Books for the asking.

PRATT'S

PRATT'S POULTRY REGULATOR

Prices: 26-oz. pkg., 30c; 4 lbs., 60c; 9 lb., \$1.25.

PRATT LICE POWDER

Price: 1-lb. pkg., 30c.

PRATT'S LIQUID LICE KILLER

Price: 1-qt. can, 60c.

PRATT'S WHITE DIORRHOEA REMEDY

Price: Per package, 30c postpaid.

LEE'S GOODS

LEES LICE KILLER

Destroys either by vapor or contact. No trouble to apply; just paint the roosts or wall at night. Rids poultry and houses of all vermin. Is prepared exclusively for this purpose. Prices: qt. can, 60c; 2 qts., 90c; 1 gal., \$1.50.

LEES LICE POWDER

Price: 1-lb. can, 30c.

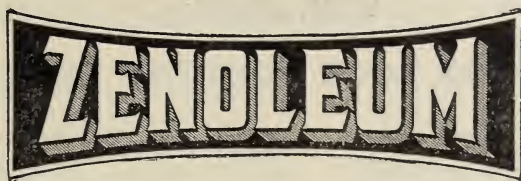
LEES GERMOZONE

Price: 12-oz. bottle, 75c.

LEES EGG MAKER

Is not a tonic nor a medicine, but a meat food of great value. It will make hens lay, chicks grow, and keeps them all in a healthy condition. Prices: 2-lb. pkg., 60c; 5-lb. pkg., \$1.10; 25-lb. pail, \$4.50.

Disinfectant
Animal Dip



Insecticide
Antiseptic
Lice Killer

**ZENOLEUM USED BY 46 STATE AGRICULTURAL COLLEGES
FOR CATTLE, SHEEP, HOGS, HORSES, POULTRY, DOGS**

Here is the most wonderful Disinfectant, Animal Dip and Livestock Remedy in all the world. It kills lice and vermin of all kinds. Cures sores and wounds on animals and poultry. It is very economical and can always be depended upon for positive results.

TRY A CAN ON OUR SAY SO

8 ounces, 35c; quart, 75c; ½-gallon, \$1.25; gallon, \$2.00; five gallons, \$8.00.

Zenoleum Lice Powder—This is especially prepared for poultry, but is efficient on all livestock. It does destroy lice and mites on poultry, removes fleas from dogs and lice from cattle and horses. We are positive this is the VERY BEST of all the lice powders, and we guarantee it absolutely. Price for full one-pound package, 30c. Not prepaid. Postpaid, 37c

KOW KARE

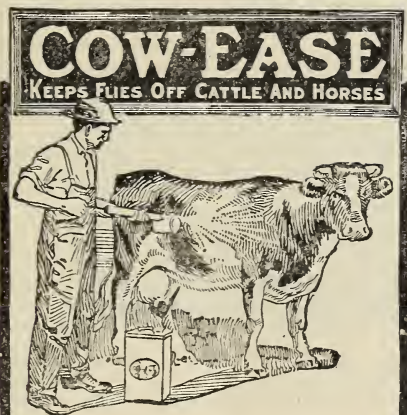
KOW KARE is different from anything ever discovered for cow troubles. It is the only cow medicine that is strictly for cows only. It is not a stock food, but a specific remedy especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water, Swelling of the Bag, etc. It prevents abortion and removes retained after-birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. Makes poor cows good, good cows better, and makes more money for cow owners. It increases the milk flow, and enables the cows to produce strong, vigorous calves. It's the dairyman's gold mine, and a sure profit-payer. Price, 65c, can wt., 1¾ lbs., and \$1.30 cans, wt. 3½ lbs.

BAG BALM

A soothing, penetrating ointment for all infections of the bag. 60c Pkgs. Wt. ½ lb.

GRANGE GARGET CURE

An unsurpassed and positive cure. 70c cans, wt., 2 lbs.



PROTECT your cows from fly pests. They'll repay you by yielding more and better milk.

COW-EASE is the standard of its kind. A gallon will spray a cow 200 times. Never blisters nor gums the hair.

We guarantee it to give you satisfaction. Try **COW-EASE** on one cow and notice the difference.

COW SPRAYS

Cows are not like machines. They will not yield big quantities of milk of high quality unless they can feed in peace and comfort. Their greatest enemy is flies. Every Dairyman and owner of livestock should spray his cattle with Cow Ease during the summer season.

1 quart Cow Ease, 60c.

½ gallon Cow Ease, 90c.

1 gallon Cow Ease \$1.50.

5 gallons Cow Ease,

Special prices on Dozen Lot Orders.

CONKEY'S FLY KNOCKER

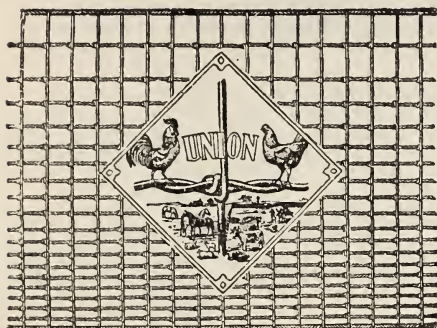
We have users who say that this is the best fly spray they have ever used. We believe them. Try it.

Prices: 1 quart, 70c; ½ gallon \$1.15; 1 gallon \$1.75.

Use one of our Continuous Spray Pumps (Listed on Page 53) for economical application of fly spray. They are efficient.

WIRE FENCING

UNION LOCK POULTRY FENCE



Union Lock

Union Lock "Square Mesh" Poultry Fence

Made of two strands of No. 20 wire run horizontally with No. 19 steel wire vertical strips every three inches, the first six cables 1½ inches apart; the next three are 1½ inches, and then 6 to 2 inches, and all above are 4 inches. This makes the fence tight at the bottom, where needed for small chicks. This fence will fit any unevenness of ground, and because of its strength and construction requires no top or bottom rail and only half as many posts as the ordinary wire netting. It is thoroughly galvanized and will last for years. The wires are not mutilated in weaving. Easy to handle, easy to build and easy to move.

Price Per Roll

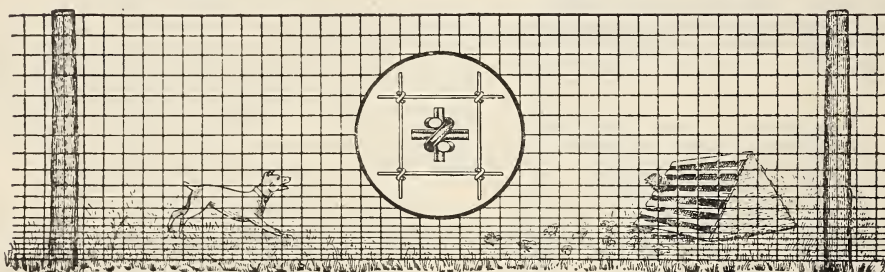
36-inch, 165 feet to roll	-----	\$4.60
48-inch, 165 feet to roll	-----	5.50
60-inch, 165 feet to roll	-----	6.40
72-inch, 165 feet to roll	-----	7.25
Galvanized Staples, per lb.	-----	15c

No. 20 DIAMOND MESH POULTRY WIRE in rolls 150 feet long, in the following widths.

Write Us for Special Price on Large Quantities

	12-in.	18-in.	24-in.	30-in.	36-in.	48-in.	60-in.	72-in.
2-inch mesh	-----\$1.60	\$2.10	\$2.70	\$3.20	\$3.65	\$4.90	\$6.10	\$7.35
1-inch mesh	-----3.25	4.90	6.25	7.45	8.50	11.25	-----	-----

BLUE RIBBON POULTRY FENCE



Spacing between stay wires from bottom to top is as follows:

1, 1, 1, 1, 1½, 1¼, 1½, 1¾, 2, 2¼, 2¾, 3¾, and balance 4 inch.

Heavier than Poultry netting. No. 15 wire top and bottom, and with stays and strands of No. 17 wire. Stay wires 4 inches apart.

Per Rod

2048-4-17 Blue Ribbon P. Fence, 20 strands, 4 feet high, weight per 100 rods 463 lbs.	60c
2360-4-17 Blue Ribbon P. Fence, 23 strands, 5 feet high, weight per 100 rods 544 lbs.	71c
2672-4-17 Blue Ribbon P. Fence, 26 strands, 6 feet high, weight per 100 rods 625 lbs.	82c

No. 14 SQUARE DEAL POULTRY FENCE

Top wire No.11 and bottom wire No. 12, strand and stay wires, No. 14. A very substantial poultry fence, strong enough to turn farm stock. The first three spaces at the bottom are only one inch wide, a much closer spacing than common poultry netting. Stays are 6 inches apart.

Per Rod

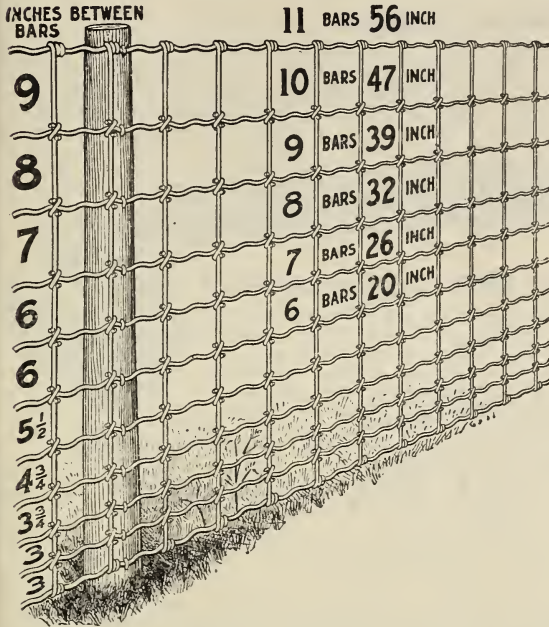
1636-6-14 Square Deal P. Fence, 36 inches high, weight per 100 rods 728 lbs.	-----65c
1948-6-14 Square Deal P. Fence, 48 inches high, weight per 100 rods 877 lbs.	-----78c
2260-6-14 Square Deal P. Fence, 60 inches high, weight per 100 rods 1027 lbs.	-----92c

NOTE—Square Deal and Blue Ribbon Fence sold only in 10 rod rolls.

WRITE US FOR PRICES ON SINGLE WALK GATES, DRIVE GATES, FOR YARDS OR FIELDS AND ORNAMENTAL WIRE FENCE

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

SQUARE DEAL FIELD AND HOG FENCE



Strong, simple and durable. The best fence for the money ever put out. Strand wires are waved slightly, giving an elastic tension to the fence that keep it tight and trim, absorbing all expansion and contraction due to extreme changes in temperature. Stay wires are in single piece.

THE SPECIAL FEATURE OF

Square Deal Fence, however, is its unique lock. This lock is put on by peculiarly constructed dies in a very powerful machine. The dies are so shaped that in pressing the lock over the strand and stay wire it forms a bend into both the stay and strand wires, thus clinching them together in a manner that is practically immovable, yet allowing the flexibility which is necessary in stretching over rough and uneven ground.

This lock obviates wrapping the stay wire around the strand wire or making any joints.

No. 12½ SQUARE DEAL FENCE

Top and bottom wires No. 10 guage; strand and stay wires, No. 12½ guage.

	Per Rod.
726-6-12½ Square Deal Fence, 26 inches high, weight per 100 rods, 599 lbs.	47c
832-6-12½ Square Deal Fence, 32 inches high, weight per 100 rods, 689 lbs.	55c
939-6-12½ Square Deal Fence, 39 inches high, weight per 100 rods, 850 lbs.	63c
1047-6-12½ Square Deal Fence, 47 inches high, weight per 100 rods, 950 lbs.	70c
Stay wires or pickets on above are 6 inches apart. That listed directly below 12" apart.	
832-12-12½ Square Deal Fence, 32 inches high, weight per 100 rods, 546 lbs.	41c
1047-12-12½ Square Deal Fence, 47 inches high, weight per 100 rods, 688 lbs.	51c

ECONOMY FENCE

A light weight, high quality fencing, built to meet the needs of the man who must have a low priced fence. Built with the Square Deal Lock but with lighter wire. It will give longer service than a cheap quality fence, and use less posts than the stay or hinge joint fence.

Only the best grade of galvanizing, which produces long life wire, is used in Economy Fence.

Top and bottom wires, No. 11; strand and stay wires, No. 14.

	Per Rod
726-6-14 Economy Fence, 26 inches high, weight per 100 rods, 407 lbs.	37c
832-6-14 Economy Fence, 32 inches high, weight per 100 rods, 520 lbs.	43c
939-6-14 Economy Fence, 39 inches high, weight per 100 rods, 590 lbs.	50c
1047-6-14 Economy Fence, 47 inches high, weight per 100 rods, 660 lbs.	56c

SQUARE DEAL FARM GATES

	Price
8-foot Square Deal Farm Gate, 48 inches high, weight 62 lbs.	\$8.75
10-foot Square Deal Farm Gate, 48 inches high, weight 73 lbs.	9.75
12-foot Square Deal Farm Gate, 48 inches high, weight 81 lbs.	11.00
12-foot Square Deal Farm Gate, 54 inches high, weight 84 lbs.	11.50

BARBED WIRE

Galvanized Barb Wire, 2 point light, 80 rods in spool-----	}
Galvanized Barb Wire, 4 point light, 80 rods in spool-----	
Galvanized Barb Wire, 2 point heavy, catch weight, per 100 lbs.--	
Galvanized Barb Wire, 4 point heavy, catch weights, per 100 lbs.--	

Market Prices
on
Application

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

SPRAYS AND INSECTIDES

NOTE—Liquid and Poisonous Sprays cannot be mailed. Solid sprays, extra for postage.

Lime and Sulphur Solution

The "Lime and Sulphur" Solution for Jan Jose scale is endorsed by experimental stations and state horticultural societies of all the fruit growing states. It is recognized and recommended as the best known preparation for exterminating San Jose on all deciduous trees. Our Lime and Sulphur Solution is made of the purest and best quality of Sub-limed Sulphur and of Lime that tests 99.98 per cent. pure. It is a clear, deep cherry colored liquid, free from sediment and is a beautiful product, is very reasonable in price, and its work is perfect. It is all ready to mix just as you get it. Merely add 11 gallons of water with each gallon of the Lime and Sulphur Solution. There is no sediment to clog the sprayers. No boiling to be done, which saves fuel, time, labor and annoyance. It is always alike and uniform in strength and results. **Prices; qt., 25c; gal., 75c; 5 gals., \$2.50; bbl., \$13.00.**

SHERWIN-WILLIAMS DRY LIME-SULPHUR

SHERWIN-WILLIAMS DRY LIME SULPHUR is not an entirely new product—it is just an improved, standard spray material that has been perfected by the Sherwin-Williams Co. It is made to supply the demand of the growers for a convenient, economical and efficient tree spray for the control of scale insects and certain fungus diseases. It is simply a practical form of Lime Sulphur which, for years has been known by growers as an effective spray material. For the usual dormant spray against scale insects such as San Jose Scale, Oyster Shell Scale, etc., from 10 to 15 pounds to 50 gallons of water. **Price, lb. can, 30c; 5 lb. can, \$1.25; 10 lb. can, \$2.00; 25 lb. can, \$4.00; 50 lb. can, \$6.75; 100 lb. drum, \$12.50.**

"CORONA" Arsenate of Lead—DRY POWDERED

Contains only Arsenic and Lead Oxides. No Fillers

Mixes quickly and easily, stays mixed longer and sticks better to leaves, branches and fruit than any other Arsenate.

"CORONA" Dry Powdered Arsenate is a light, fluffy powder that cannot freeze, dry out, cake or lose its strength—carries the highest possible percentage of arsenic oxide, 33%—is always uniform and requires only one pound to 50 gallons of water. Efficient, economical and convenient. Highest percentage of killing power. **Prices, ½-lb., 25c; 1-lb., 40c; 4-lbs; \$1.25; 10 lbs., \$2.50; 25 lbs., \$6.00.**

Black Leaf "40" For Aphis

Latest and best tobacco spray for aphis, thrip, plant lice, etc. One pound makes 170 gallons. **1-oz. bottle, 35c; ½-lb. can, \$1.25; 2-lb. can, \$3.50; 10-lb. can, \$13.50.**

NICO FUME, LIQUID

The best fumigant and spray for greenhouse work. Kills aphis, red spider, mealy bug, thrip, etc. **¼-lb. can, 75c; 1-lb. can, \$2.25; 4-lb can, \$8.00; 8-lb. can, \$15.00.**

WHALE OIL SOAP

For aphis, plant lice, etc. **1-lb. brick, 15c.**

SULPHUR, POWDER

1lb., 5c; 100 lbs., market price.

TOBACCO DUST

1lb., 15c; 10 lbs., \$1.20.

TREE TANGLEFOOT

For caterpillars, moths and worms. Protects against all climbing insects. One pound makes a band 9 feet long. **Price: 1 lb., 50c; 5 lbs., \$2.25; 10 lbs., \$4.00; 20 lbs., \$8.00.**

BLUESTONE—Vitriol

1lb., 15c; per 100 lbs., market price.

HELLEBORE

Market price.

PARIS GREEN

The standard of purity. Guaranteed superior to other makes. **Prices: ¼-lb., 30c; ½-lb., 55c; 1lb., \$1.00; 2 lbs., \$1.90.**

Leinen's Slug Go, 45c.

Leinen's Mildew Go, 50c.

Leinen's Ant Go, 35c.

Leinen's Method Destroy Rats, 35c.

Okay Gopher Poison, 1 lb., 60c.

Okay Gopher Poison, 60 oz., \$3.00.

PURITAN LIME

A specially manufactured and highly refined lime product for household and other uses. Can be used as a whitewash or for any purpose where a slack lime is desired.

Price pre pkg., 55c.



VEGETABLE SPRAY

For destroying and preventing maggots, grubs and worms that infest turnips, radishes, beets, rutabagas, cabbage and cauliflower, etc., also recommended for combating crown borers in strawberries. **½ pint 50c; pints, 65c; quarts, \$1.00; gals.; \$2.50.**

Caution Against Spraying When Trees Are in Full Bloom—Spraying when trees are in bloom may destroy bees and other insects necessary to palinate and these natural agents should not be interfered with as their work of transferring the pollen insures bountiful crops and shapely fruit.

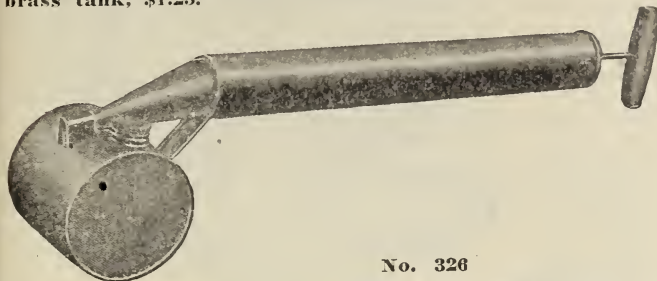
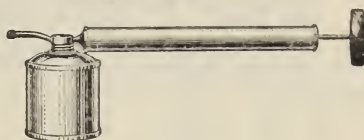
SPRAY PUMPS AND SPRAYERS

AUTO SPRAY NO. 26

The Auto-Spray No. 26 is so designed that excessive pressure generated on the down stroke of the plunger allows this sprayer to generate a continuous mist-like spray. The bowl can be detached from the pump for filling.

Auto-Spray No. 26A, 1 qt., all tin, \$1.00.

Auto-Spray No. 26B, 1 qt., tin pump, brass tank, \$1.25.



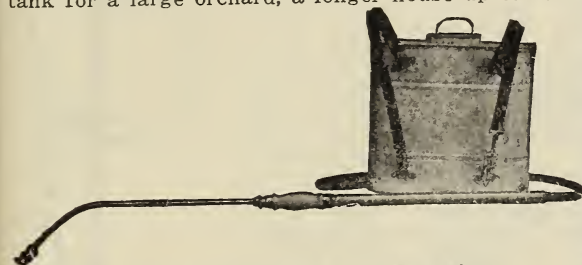
No. 326

THE STANDARD SPRAY PUMP

The Standard Spray Pump is in reality simply a very carefully designed and accurately made "Squirt Gun," provided with a proper outfit of nozzles.

Its plan of operation is slightly different from other types of spraying apparatus, since the hose is used on the suction end instead of the discharge end. This makes it possible to use the pump with a bucket, barrel, tank or knapsack, depending upon the number of trees or the kind of spraying to be done.

For bucket use a 3½-foot length of hose is supplied. To use it with barrel or tank for a large orchard, a longer house up to 25 or 30 feet is desirable.



Standard Pump with "Potato" Extension and No. 3 Nozzle Attached to Knapsack

PRICE LIST

The Standard, with 3½ feet hose and full set nozzles	\$5.50
Knapsack attachments	4.25
Extensions, 19 inches long	1.00
Extra hose, per foot	.22

No. 326—Air chamber 14½ inches in length and 1¾ inches in diameter; holds about 1 quart; all tin. Price 50c.

No. 323—Same as No. 326, except it has galvanized tank with tin tube. Price 60c.

For spraying young or scattered trees or truck crops such as potatoes, tobacco, etc., the knap sack and short extension are used. With these attachments, the Standard will spray potatoes one row at a time at the rate of an acre an hour or better.

The Standard is made entirely of brass. No Leather Packings. No Iron Castings to rust or decay. Nothing to get out of order.

WARRANTED for five years

AUTO-SPRAY No. 9—COMPRESSED AIR SPRAY PUMP

The Auto-Spray No. 9 is a screw top, with following exclusive features. The pump handle is malleable iron and the can collar on both galvanized and brass sprayer is of brass, also the locking nut. With both of these parts made of brass it is impossible to have them corrode and stick so tight that they cannot be unscrewed. Packing ring on tank is held in place by a flange pump collar which floats so that it does not have to turn in its seat. This insures perfect lock and long life. Tanks are well riveted and soldered both inside and outside.

SPECIFICATIONS—Capacity 3½ gallons; height 2 feet; diameter 7 in.; furnished with 2 feet ½-in. 5-ply hose and our KLOG-PROOF, AUTO-POP Hand Grip Automatic Nozzle. This nozzle made with pipe thread and can be used with ordinary pipe extension.

AUTO-SPRAY No. 9-D, Galvanized Tank. Price, \$6.50.

AUTO-SPRAY No. 9-B, Brass Tank. Price, \$9.00.



SPRAY PUMPS AND SPRAYERS—Continued

LOWELL COMPRESSED AIR SPRAY PUMP NOTE THESE EXCLUSIVE POINTS

1. It is devoid of complex or intricate parts and is the easiest understood Compressed Air Sprayer in the world.

2. It is both automatic and positive in its action.

3. One charge is sufficient to expel entire contents of tank.

4. Each sprayer is thoroughly tested with both air and water pressure.

5. Machine can be easily washed and aired after using.

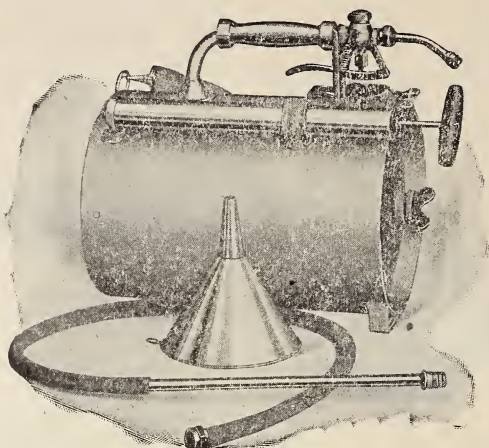
6. It is so simple in construction that a child can operate it.

Tree attachment and funnel, for filling, with brass wire strainer with each machine. Strongest Air Pressure Sprayer made—will stand five times the air pressure necessary to operate. Convex heads, seamed and soldered. Capacity of tank 3 gallons. Handy to carry; shoulder strap with each machine.

No. 110—Galv. Steel, Aluminum Fin., \$6.50.
No. 111—Brass, Polished and Lacquered,

\$9.00.

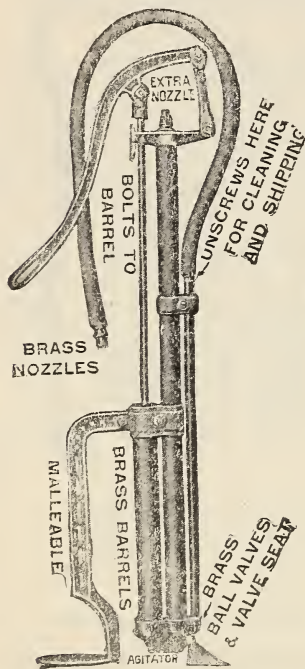
3-foot extension; brass, \$1.00.



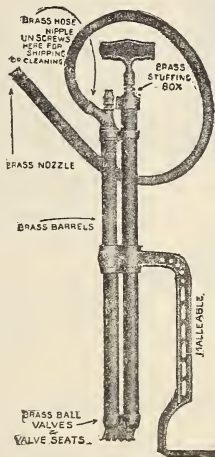
LOWELL COMPRESSED AIR SPRAY PUMP

LEVER HANDLE BUCKET PUMP NO. 31

The lever handle and large air chamber make this the most powerful bucket pump and the easiest one to operate. All working parts are solid brass with brass ball valves and patent agitator. Fitted with graduating Vermorel nozzle to throw a fine or coarse spray or a solid stream. Weight, 8 lbs., Price, \$7.75.

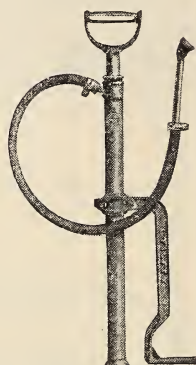


No. 31 Lever Handle Bucket Pump



No. 26 Spray Pump

No. 26—Bucket Spray Pump. This little pump is very convenient for all sorts of small work. Has brass cylinder and valves, two nozzles, for fine or coarse work. The best low priced pump on the market. Price \$6.00.

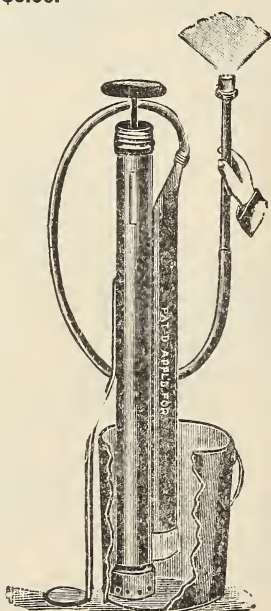


No. 95 SPRAY PUMP

The No. 95 Pump is a double action all brass, domestic service spray pump. It is equipped with hemp plunger and ball valves and our No. 80 Angle Service Nozzel. Nozzel is complete with strainer and designed to give a fine mist. By removing verbal disc a straight stream can be had. Can be used for white washing successfully.

Weight 6 lbs.

Price, \$5.00.



No. 28 Whitewash Pump

No. 28—Whitewash sprayer and force pump is designed for use in pail or bucket and will fit any size. The pump is made of galvanized iron. The top and bottom are made of brass. It is regularly equipped with 3 feet best hose, one foot brass extension rod and brass nozzle, which gives two different size sprays. It has ball valves and steel foot rest. The pump is provided with an overflow which carries all the liquid which might get above the plunger, back into the pail. The plunger is easily removed and easy to operate to do double action. This pump is especially designed for spraying whitewash. Price \$3.25.

SPRAY PUMPS AND SPRAYERS—Continued

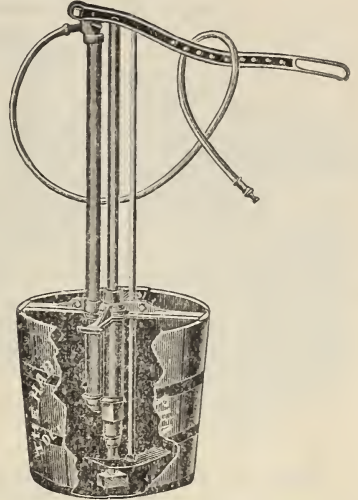
THE HARDIE" ALL BRASS LEVER BUCKET PUMP

This pump, as shown here, is a high grade, all brass bucket pump, especially designed to meet the long felt want in this line. It is the only bucket pump on the market that has a mechanical agitator, and that is so designed as to always stand in position in the center of the bucket. It can readily be detached from the bucket by unscrewing a nut on the spider. The new device for holding the pump firmly in place in the center of the bucket enables the operator to carry the whole outfit with one hand. As will be seen by the cut here shown, the bulk of the weight is below the top of the bucket, even when the bucket is empty. This pump, as well as being held firmly in the center of the bucket, has a mechanical agitator passing directly in front of the strainer at every stroke of the handle, as shown in cut. It should be remembered that it is just as necessary to have the liquid in a bucket well agitated as that in a barrel. It is capable of developing a 200-pound pressure and maintaining a 100-pound pressure while spraying with 35 strokes to the minute, and will discharge 30 gallons of liquid per hour.

Equipped with heavy wooden bucket, 3 feet best spray hose.

1 Spraying Lance, 18 inches long and Vermorel Nozzle.

Price -----\$15.00

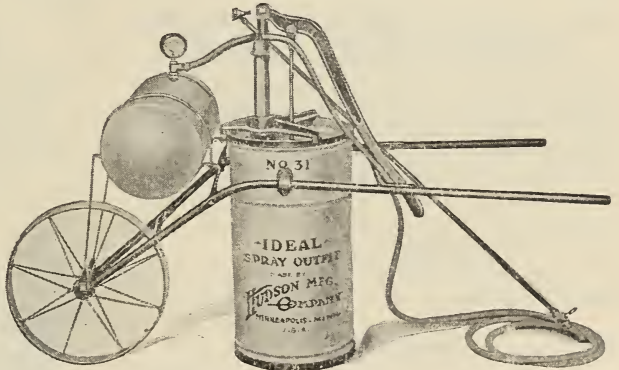


The Hardie Bucket Pump

IDEAL SPRAY OUTFIT No. 30 and 31

A strong, durable wheel barrow sprayer. The Ideal is well designed and will develop a higher pressure than any other wheel barrow sprayer. Pump—seamless brass cylinder, 1 1/4 in. diameter, 7 in. long; air chamber 2 in. diameter, 30 in. long, made of steel tubing. Tank—Heavy Galvanized Steel, re-inforced top and bottom with heavy channel iron hoops. Capacity 15 gallons. Wheel—20 in. diameter by 2 1/2 in. tire. Valves—Bronze balls, one cage. Equipment—15 feet, 1/2-in. spray hose, 8 feet pipe extension, 1/4-in. Fog nozzle and leakless shut-off. No. 30 Outfit without Air Tank or Pressure Gauge, weight crated 100 lbs.

Price, \$26.50.



Above illustrates No. 31 Outfit, which is the same as No. 30 described at left but with addition of pressure tank and gauge. Air Tank is boiler iron, tested to 275 lbs. pressure. Pressure gauge reads to 200 lbs.

No. 31 Outfit, crated, weight 130 lbs.

Price, \$37.50

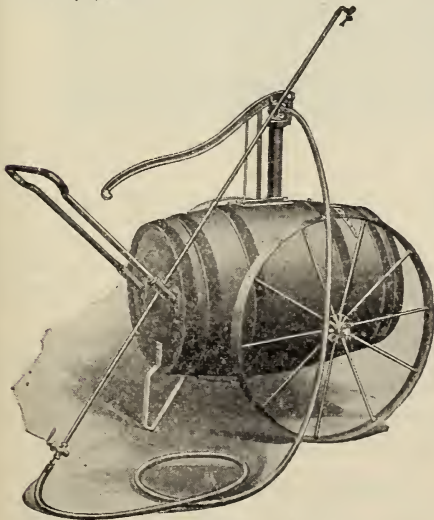
THE "HARDIE" WHEEL OUTFIT NO. 21

This outfit is designed to meet a long felt want by the small fruit grower and gardener for a suitable arrangement in this line. It is a handy, neat appearing, up-to-date spraying outfit, can be taken where it is impracticable to take a wagon.

The 30-gallon barrel is mounted, as shown in cut, on strong wrought iron wheels 25 inches in diameter, with 1 1/2-inch times. The solid steel axle passes clear through the barrel and is leaded into special castings on either side, making a strong, serviceable machine. The barrel is nicely painted and provided with a hardwood strainer with a bottom of brass screen wire.

Equipped with one bamboo rod and leakless stopcock, one Vermorel Nozzle.

Price -----\$40.00



The Hardie Wheel Outfit No. 21

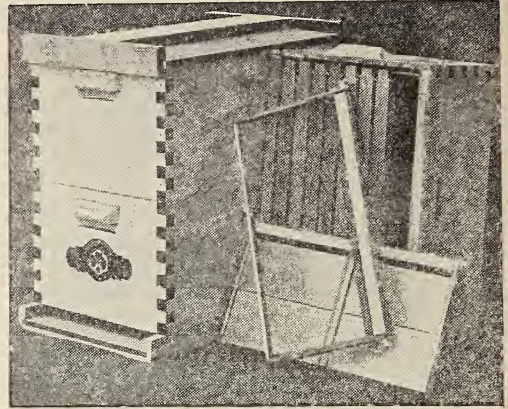
We also Carry in Stock, Spray Nozzles, Fittings, Hose, Extension Rods, etc.

BEE SUPPLIES

No. 1 Western Pine Dovetailed Hive—Complete with 1 super. Consists of 1 bottom board, 1 body, 1 super, 1 cover, 8 Hoffman brood frames, 1 division board, 2 tightening springs for super, 6 section holders, 5 slotted separators, 24 sections all nailed and ready for use. **Price \$3.75.**

For foundation starters for frame and sections consisting of 2 sheets medium brood and 3 sheets thin surplus foundation. **Add to price of hive, 35c.**

Per 5 hives K. D. flat, complete without foundation starters, weight about 150 lbs. **Price, \$17.00.**



**No. 1 Western Pine Bee Hive for
4 1/4-4 1/4-1 7/8 Sections.**

No. 1 Western Pine Dovetailed Supers

No. 1, Super—For 8 frame hive, sections, no starter, set up. **Price, \$1.50.**

No. 1—5 K. D. Supers for 8 frame hive with sections, no starter; weight about 40 lbs. **Price, \$6.25.**

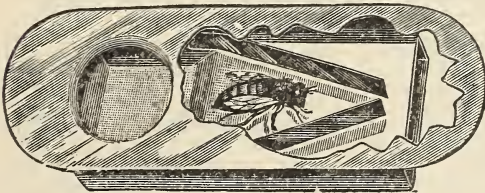
Hoffman Brood Frames

The Hoffman Improved Foundation Fastening Frames are the latest, most satisfactory brood frames. The top bar is made with a beveled strip, which holds the foundation absolutely in place, perfectly straight and exactly in center of top bar. Anyone can put foundation in these new frames very rapidly.

Improved Hoffman frames. **10 for 70c; 100 for \$6.25.**

SEPARATORS

One separator should always be placed between each section holder so that the bees will build the honey comb even in each section. Slotted wood separators, 4 1/2 x 18. Weight, 8 lbs. per 100. **10 for 15c; 100 for \$1.10.**



PORTER BEE ESCAPE

Great labor-saver; weight 2 ozs. **Price, postpaid, 25c.**

WIRE IMBEDDERS

The Easterday -- Weight 4 ozs. **Price, postpaid, 60c.**

Section Honey Boxes

Cut No. 1—Sections are made of the choicest white basswood lumber, and are perfect in finish and free from defects.

Root's No. 1—Best White. **100 for \$2.00; 500 for \$9.50.**

SECTION HOLDERS

Six section holders with separators, one follower and wedge are put in each 24-lb. super, and each section holder holds four 1-lb. honey boxes. The bottom strip is 1/4-inch thick, and is cut out to fit in sets of the slotted sections—the style generally used.

Root's—1 7/8 x 18 3/8 inches, slotted holders, weight 23 lbs. per 100. **Price, Each 5c; 100 for \$4.50.**

COMB FOUNDATION

There is little question but that it pays to use foundation in full sheets in the brood frames and sections, especially the latter. If you think you cannot afford so much you should at least have a strip for a starter. It will help much more than it costs you, in getting straight, even combs. You can use a starter any width from one inch up.

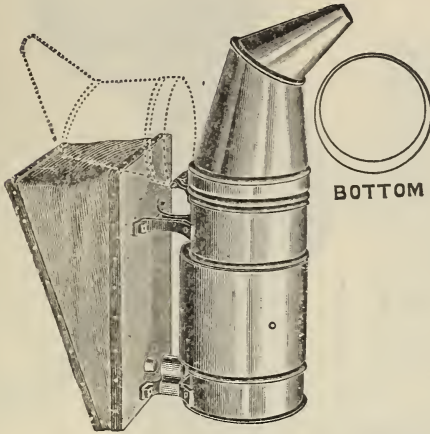
Light Standard Brood Foundation—7 3/4 x 16 7/8; 7 sheets per lb. **Price per lb., 85c; 10 lbs., 80c per lb.**

Light Section Foundation—3 7/8 x 15 1/2, 28 sheets per lb. **Price per lb., 90c.**

FOUNDATION FASTENERS

Parker's—A satisfactory and serviceable tool; weight 1 lb. **Price, 65c.**

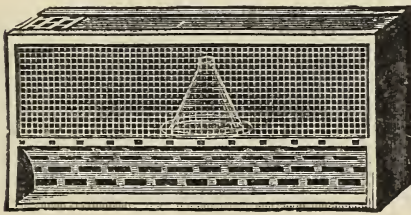
BEE SUPPLIES—Continued

**STANDARD ROOT SMOKER**

Makes a good strong blast. The most satisfactory and serviceable smoker. Standard size, 3¼-inch; weight 2 lbs. **Price, \$1.85.**

BEE ENTRANCE GUARDS

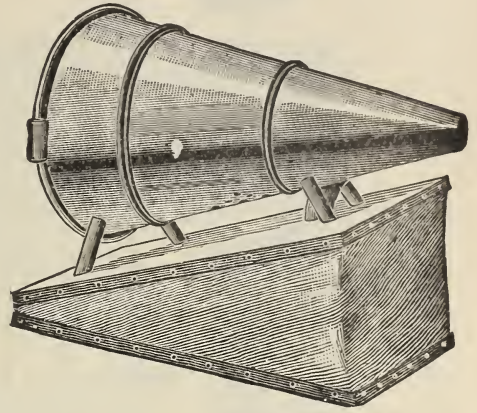
Roots—These are to admit workers, but exclude drones. Weight ¼-lb. **Price, 40c.**

**ALLEY'S COMBINED DRONE AND QUEEN TRAP**

Improved wire front; 8 frame, weight 1¼ lbs. **Price, \$1.20.**

MANUM'S SWARMING DEVICE

A most complete swarming device. The swarmer is light, conveniently carried, and will reach a swarm 20 feet from the ground. Complete wire basket, with bail, no pole. **Price, \$2.50.**

**CLARK'S COLD BLAST SMOKER**

Probably the most popular smoker in use today. Weight 1¼ lbs. **Price, \$1.25.**

ALEXANDER FEEDER

This is comparatively a new feeder. The bottom board slides forward, and the feeder is placed at the back and under the hive. The bees go into the feeder from the brood chamber. This feeder has many good features. **Wt. 1¼-lbs. 80c.**

HONEY BOARDS

Used to confine the queen to the brood chamber.

8-frame, unbound, 12x19½ inches. **Price, 85c.**

8-frame, wood and wire bound, 13⅞x20 inches. **Price, 95c.**

BEE VEILS

Globe—Has five bars that will keep veil away from head. Weight 6 oz. **Price, \$2.00.**

No. 2 Veil—Cotton tulle, silk face. **Price, \$1.60.**

New ABC XYZ of Bee Culture—**Price, \$3.50.**

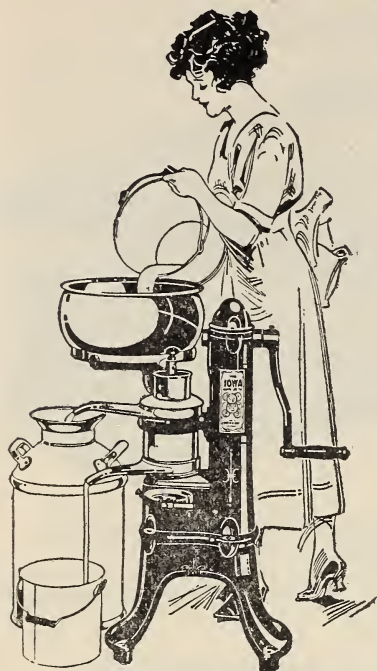
BEE'S WAX

Per lb. Market price.

NO. 30 TINNED WIRE

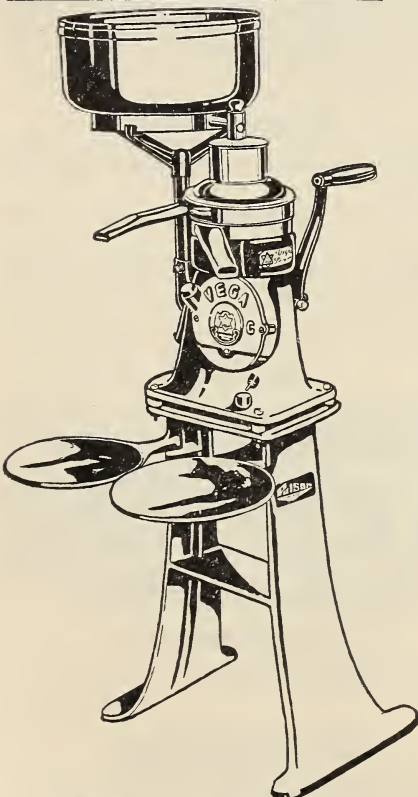
½-lb. spools. **50c each.**

CREAM SEPARATORS



IOWA SEPARATOR

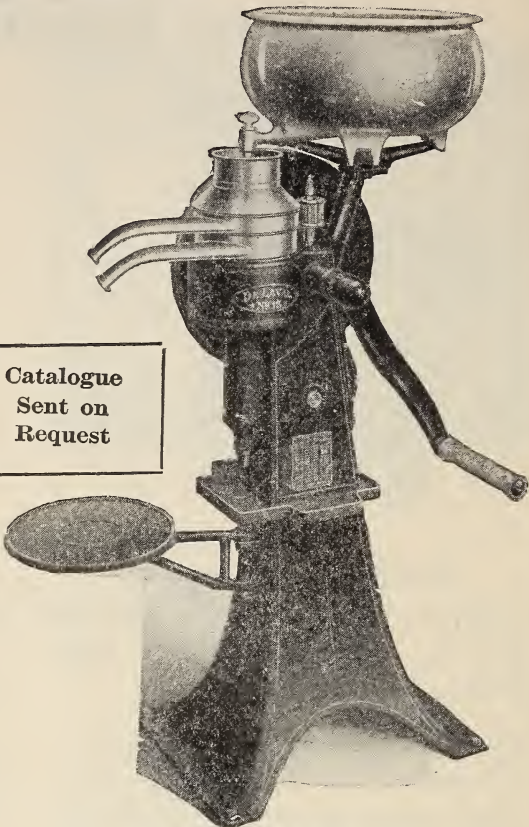
Power attachments can be furnished with all makes.



VEGA SEPARATOR

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Catalogue
Sent on
Request



NO. 15 DeLAVAL SEPARATOR

THE DE LAVAL is one of the oldest and most popular Separators on the market and is also known for its thoroughness in close skimming and its wonderful durability.

		Capacity Per Hour	Price
No. 5	-----	225 lbs.	\$ 72.50
No. 10	-----	350 lbs.	87.50
No. 12	-----	500 lbs.	97.50
No. 15	-----	750 lbs.	120.00
No. 17	-----	1000 lbs.	135.00
No. 22	-----	1350 lbs.	215.00

THE IOWA is known throughout the country as the Separator with the curved disc bowl and its wonderful skimming and mechanical construction.

		Capacity	Price
No. 125 A	-----	500 lbs.	\$ 91.75
No. 130 A	-----	650 lbs.	95.00
No. 135 A	-----	850 lbs.	100.75

THE VEGA is a very popular moderate priced Separator. Only the best materials, such as Swedish fine iron, steel, and phosphor-bronze enter its construction. The bowl is of the disc type, with parts so arranged as to give the maximum capacity and efficiency.

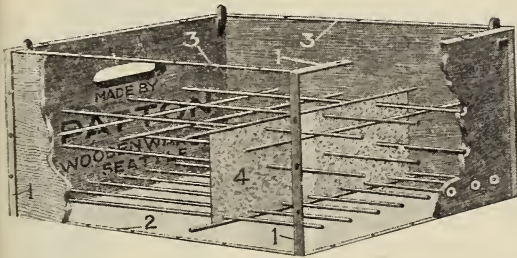
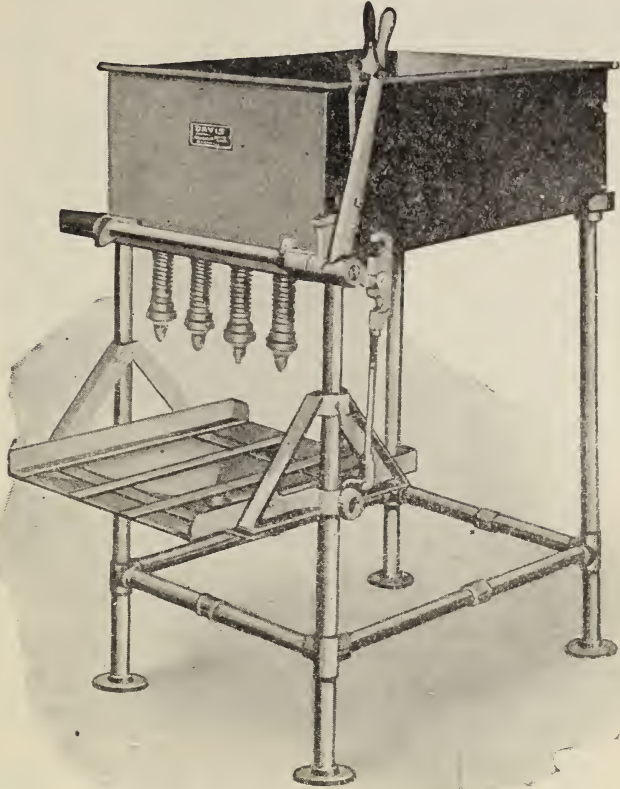
		Capacity	Price
Vega E	-----	150 lbs.	\$43.00
Vega F	-----	300 lbs.	54.00
Vega G	-----	450 lbs.	69.50
Vega L	-----	600 lbs.	75.50
Vega M	-----	900 lbs.	84.00

DAIRY SUPPLIES—Continued

DAVIS MILK BOTTLE FILLERS

As meeting the demand of a first-class up-to-date Milk Bottle Filler, we offer the Davis Special Fillers. These are especially adapted to the rapid filling of from 200 to 600 bottles daily. Arranged with a ratchet lifting device of Mr. Davis' own design, automatically locking when valves are open, leaving operator's hands free to cap the row of bottles previously filled, or prepare the next case for filling. When the bottles are filled all but the last row have been capped. The Davis patented valves are the only valves that may be regulated to fill at any desired height. The bottles are filled just right, so that the caps may be placed on them clean and dry, and the milk is prevented from streaming over the outside of the bottles as with most fillers. Our valves are made of heavy bronzed metal, nickel-plated, and same design and patent as on the enamel tank machines. Sold subject to guarantee to do the work satisfactory to the purchaser. Price, T-15 with tin tank, copper bottom. Price on application.

We can Quote Prices on any style or size desired.



Sanitary Bottle Delivery Crate

SANITARY BOTTLE DELIVERY CRATES

Strongest and most sanitary crates made. Dovetailed corners, reinforced inside. Will save their cost many times over in convenience and far less breakage of bottles. Made to stack.

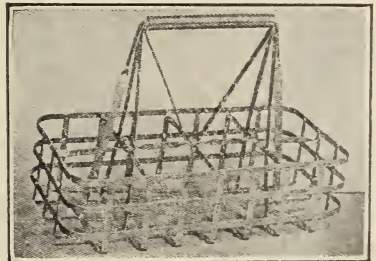
- No. 22—Half-pints; holds 24 bottles; wt., 12 lbs., -----\$1.65
- No. 20—Pints; holds 20 bottles; wt., 12 lbs. -----\$1.60
- No. 19—Quarts; holds 12 bottles; wt., 13 lbs. Special high wire -----\$1.65
- No. 18—Pint filler case; holds 12 bottles; wt., 15 lbs. -----\$1.75

GALVANIZED MILK BOTTLE CARRIER

We have a new style milk bottle carrier made of flat galvanized iron that is especially handy for the dairymen. With this carrier you can carry either pints, quarts or half-pints. They come in 6 and 8-quart sizes.

Price, 6-quart -----\$2.00

Price, 8-quart ----- 2.25



Prices Subject to Change without Notice
If You Haven't Tried Wyandotte for Washing Your Dairy Utensils, Try It.

DAIRY SUPPLIES—Continued



THATCHER MILK BOTTLES

Thatcher Milk Bottles are manufactured in the most modern factory in the country. The Thatcher Manufacturing Co. is the only concern having the use of the famous Owen Bottle Machine. This machine is called the wonder of the age and is the only bottle machine that automatically gathers the glass, taking up the same amount each time, giving correct capacity, uniform weight and even distribution of glass.

OUR GUARANTEE

First—Correct capacity, uniform weight. When you serve milk in Thatcher Milk Bottles you have no loss; you give full measure; no more, no less. You also have the satisfaction of knowing that your bottles comply with the city ordinances.

Second—Even distribution of glass, superior annealing. Ninety per cent. of breakage is caused by poor distribution of glass and inferior annealing. There are no thin spots in our bottles and they are perfectly annealed, which means your breakage will be reduced to a minimum.

Third—Perfectly smooth finish at top for caps. There are no sharp edges to cut brush handles, or checks in the glass to chip off, as our bottles are absolutely smooth and make a perfect fit for the caps.

Fourth—Absolute water white glass for the Thatcher Manufacturing Company make no other kind of bottles but milk bottles, and the glass is always kept at the proper color for milk bottles. No smoky, blue, green, red or yellow milk bottles from us. Ours are all water white.

Price per dozen quarts
Price per dozen pints
Price per dozen ½-pints

\$1.05 Per gross, wt., 270 lbs.
.85 Per gross, wt., 179 lbs.
.70 Per gross, wt., 110 lbs.

Gross Prices
quoted on application.

DAIRYMEN'S MILK CANS



One gallon capacity; wt., 2½ lbs. Prices on application.

Two gallon capacity; wt., 6½ lbs. Price on application.

Three gallon capacity; wt., 7½ lbs. Price on application.

We take particular pleasure in presenting our 1923 line of milk cans, for we feel that we can offer the strongest line on the market. The cans are the product of the Dairymen's Manufacturing Company, acknowledged to be the largest and most progressive manufacturer of cans in the country. Quality has always been their ideal, and we have adopted their cans after having made a very careful investigation of the various makes offered. The material used in manufacture of these cans is the very best obtainable. For proof of this we call your attention to the construction of the covers. Seamless necks and bottoms. No material but the very best and most select would ever stand the strain of drawing and bending which is done in the manufacture of these goods. The parts are all smooth, without waves or wrinkles and are guaranteed not to split. Material that is not properly annealed will split and crack, but these cans are guaranteed not to do this. All parts are treated to two coats of pure block tin after being properly made to size, so that all edges are tinned just the same as the flat surfaces.



Five gallon capacity; wt., 13½ lbs. Price on application.

Ten gallon capacity; wt., 22 lbs. Price on application.

MILK BOTTLE CAPS

We can furnish all the leading and most used bottle caps. Our caps are made from the very best material and are heavily paraffined. We carry in stock in quantity desired. The No Lip caps, Lip caps and Hagerstown or Perfection caps, and we also take orders for any kind of caps desired, by the barrel, with name on, without extra charge.

Price on application. Let us quote you.

We carry in Stock All Kinds of Milk Bottle and Can Brushes, Which We Do Not List in This Catalogue.—Prices Subject to Change Without Notice.

DAIRY SUPPLIES—Continued

PEERLESS

Tubular Sanitary Milk Cooler

The most satisfactory and efficient cooler made. This cooler is made of 1½-inch seamless copper channel tubes tinned inside and outside, flushed into solid cast brass heads. The channel tubes do away with distributing solder strips, making a perfect sanitary cooler. The upper and lower troughs are made of tinned copper and cast end plates. They are removable for cleaning.

OPERATION The cooler is suspended in brackets, which we furnish. The water enters at bottom and flows up through each tube and out of upper outlet. The milk runs down evenly distributed over the outside of tubes into lower trough. Total height of cooler, including troughs is 24 inches.

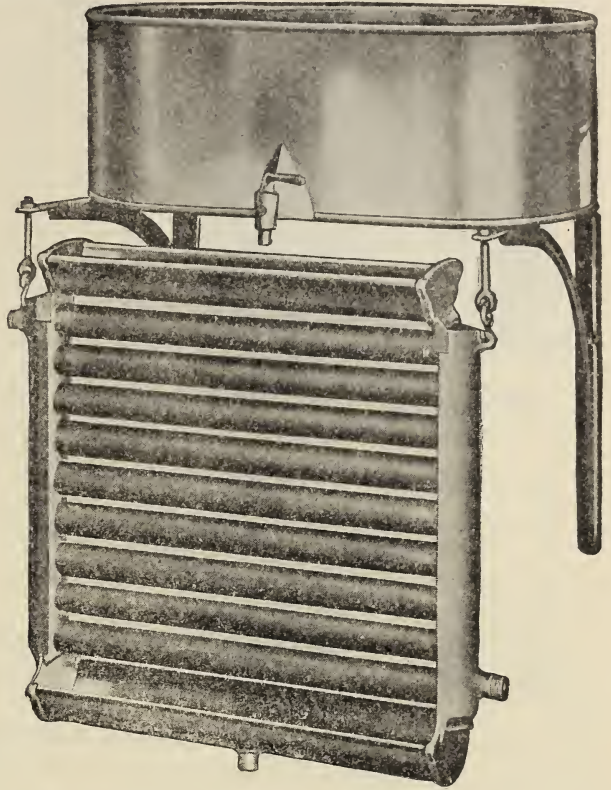
15-inch wide, 9 tube high, Cap., per hour, 182 lbs., \$38.50.

18-in. wide, 9 tube high, Cap. per hour, 250 lbs. \$42.50.

24-in. wide, 9 tube high, Cap. per hour, 300 lbs. \$47.50.

30-in. high, 9 tube high, Cap. per hour, 375 lbs. \$52.50.

36-in. wide, 9 tube high, Cap. per hour, 450 lbs.



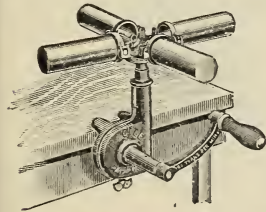
BABCOCK MILK TESTERS

Facile, Jr.

The simplest, best made and most satisfactory small hand tester on the market. Adapted for farmers and small dairymen. Working parts entirely enclosed. Bottles are seamless brass. Furnished complete with glassware, acid and directions.

2 bottle; for milk and cream; weight, 15 lbs. -----\$6.50

4 bottle; for milk and cream; weight, 16 lbs. ----- 8.75



BABCOCK TEST GLASSWARE

Milk test bottle; height 6 in., graduation 10% in 1.5%--\$0.35

Cream tests bottle; height 6 in.; graduation 40% into 1% .40

Pipette, milk and cream, 17.6 and 18 C. C. ----- .35

Acid measure, 17.5 C. C. ----- .20

THERMOMETER

Pasteurized; length, 10 inches. Price \$1.25.

Osmer's Dairy Thermometer Price .35



We Carry a Large Stock of Brushes for All Dairy Purposes

Prices Subject to Change without Notice

DAIRY SUPPLIES—Continued



Cylinder Churn

CYLINDER CHURNS

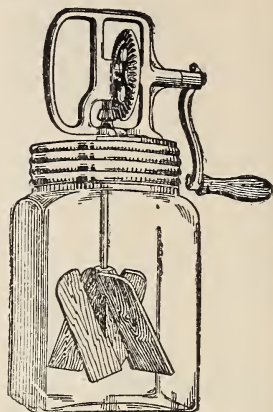
Dovetailed white pine staves, dashers attached to steel shafting. Can be removed for cleansing.

Size 1—Holds 3 gallon; churns 2 gallon; wt., 20 lbs.; Price -----\$4.50

Size 2—Holds 4 gallons; churns 3 gallons; wt., 25 lbs., Price -----\$5.25

DAZEY GLASS CHURNS

Extra heavy clear glass jar, with a finished smooth top. Steel screw-cap, heavily nickel plated. Dasher of white maple thoroughly seasoned. Dash rod of steel, tinned. Frame one piece. Natural finish wood handle. Gears carefully fitted to run smooth and noiseless. All castings double aluminum coated.



Dazezy Churn

No. 20—Capacity, 5 pints; churning capacity, 3 pints; height over all, 12 inches wt., each, 5 lbs. Price, \$2.15.

No. 30—Capacity, 7½ pints; churning capacity, 4 pints; height over all, 13 inches; wt., each, 6¼ lbs. Price, \$2.65.

No. 40—Capacity, 9 pints; churning capacity, 5 pints; height over all, 14 inches; wt., 7¼ lbs. Price, \$3.15.

BUTTER MOULDS, CALIFORNIA PATTERN

Maple, paraffin finish. Two parts held together with brass hinges. **No. 1**—Length, 7 inches; size, 1 lb. Price, 60c.

BUTTER LADLES

One piece of hardwood. Smooth surfaces; strong handle; convenient size; wide blade; spoon shape. Price, 25c.

BUTTER SPADES

One piece of hardwood; sharpened end and grooved surface; long smooth handle. Price, 15c.

Wyandotte
Sanitary
Cleaner and Cleanser

Wyandotte Sanitary Cleaner and Cleanser is a dry, snow-white powder, with no grease, fat, caustic, lye, acid or preservatives in its composition. Neither does it contain a particle of animal or vegetable matter. It is especially adapted to the cleaning of dairy utensils, tinware, cans, bottles, separators, etc. It can also be used to advantage by the housewife for family washing and general household cleaning. Carried in stock in the following sizes:



1 Sack, 5 lbs. net	Price
3 Sacks, 15 lbs. net	\$.55
5 Sacks, 25 lbs. net	1.50
Kegs, 80 lbs. net	2.25
Bbls., 280 lbs. net	6.05
	17.65

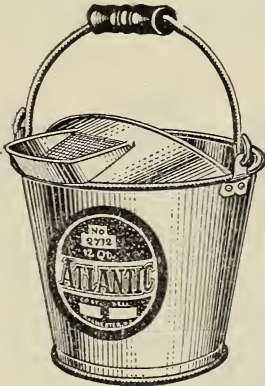
Prices Subject to Change without Notice

DAIRY SUPPLIES—Continued

**SANITARY STEEL CLAD DAIRY PAILS**

5A charcoal plate, mirror finish, four rivet ears. Extra heavy retinned bail, soldered inside and outside.

No. 4632—12-qt., 4x	-----\$1.50
No. 4634—14-qt., 4x	-----1.60
No. 4636—16-qt., 4x	-----1.70

**STRAINER PAILS**

5A charcoal plate, mirror finish, square strainer on breast.

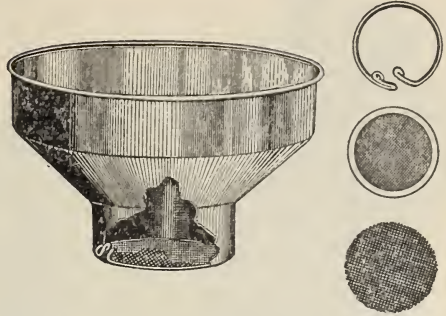
No. 3512—12-qt., 2x	-----\$1.65
No. 3514—14-qt., 2x	-----1.75

ATLANTIC CREAM SETTING PAILS, OUTSIDE COVERS

5A charcoal plate, mirror finish.

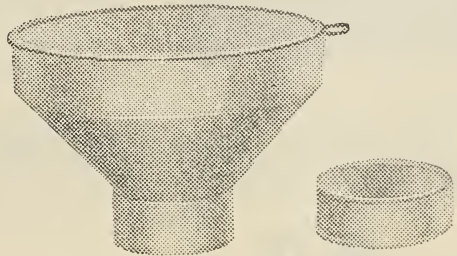
No. P17220—20-qt., 2x With guage and brass faucet	-----\$2.75
No. 1120—20-qt., 2x Without guage and faucet	-----1.45
No. S14—14-qt., Without guage	---- 1.10

We carry a cheaper line of dairy pails than we have listed, and also galvanized pails, but owing to the lack of space in this catalogue we cannot list them.

**EXTRA HEAVY RETINNED SEAMLESS MILK STRAINERS**

Sterilized Cotton Wadding, used between perforated tin and strainer cloth.

No. 1010	-----\$2.40
----------	-------------

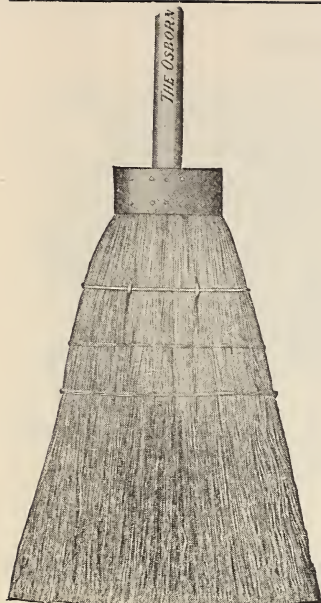
**EXTRA HEAVY RETINNED SEAMLESS MILK STRAINER**

70 mesh brass strainer cloth.

No. 1932—3qt., 3x	-----\$1.15
No. 1934—6qt., 4x	-----1.35
No. 1936—8 qt., 4x	-----1.55



Cream Pail



Barn and Warehouse
Broom. Price \$1.35



TUBE BRUSH
Brush part 1½
x4 in Handle 10
in. Price 20c.



**JERSEY CAN
BRUSH**

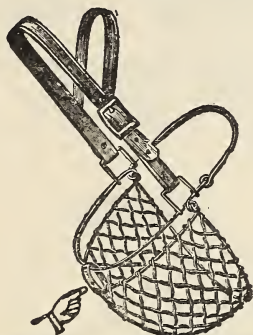
Face 9x5 in.
Price 55c.
No. 08 Can
Brush
Price 45c



**MILK BOT-
TLE BRUSH**

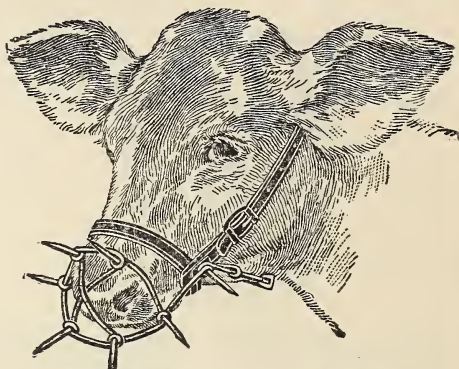
Brush part 2¾
x6 in. Handle
1½x9 in. Price
60c.

**WE CARRY A LARGE ASSORTMENT OF DIFFERENT STYLES OF
BRUSHES AND BROOMS IN STOCK WHICH WE ARE UNABLE TO
LIST IN THIS CATALOGUE OWING TO LACK OF SPACE.**



SHAW'S CALF WEANER

No. 1—For Calves -----\$0.70
No. 1—For Yearlings ----- .75



HOOSIER CALF WEANER

No. 1—For Calves -----\$.50

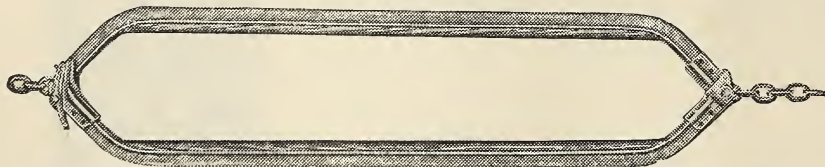


Fig. 937

LOUDEN'S WOOD LINED STANCHION

Louden's Wood Lined Stanchion, shown by Fig. 937, is decidedly the best stanchion of class on the market. The latch is exceedingly simple. The plates to which the latch is pivoted are riveted to opposite sides of the upper end of one of the T steel bars. The upper end of the other T Bar is provided with a spur, over which the latch catches and by which the hinged side is held positively and securely in locked position. The plates are provided with diverging prongs, which always guide the side into latched position, and also form guards to prevent the cows horns from opening the latch. The latch is easily and quickly operated by one hand. Besides this, it is made of a special shape of high carbon T steel, provided with a small rib. This rib adds considerably to its strength and prevents the wood strip from getting split or knocked off. Price

\$4.35

Prices Subject to Change Without Notice

DAIRY SUPPLIES—Continued

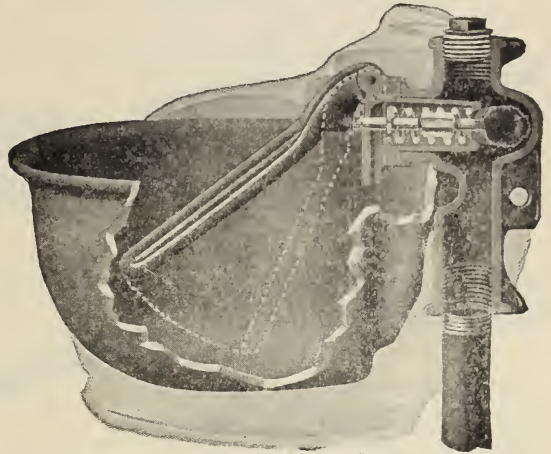
STAR WATER BOWLS

INCREASE THE MILK FLOW

Everyone knows that the more water a cow drinks the more milk she will yield; milk is about 87 per cent water. But many dairymen do not know how much MORE milk a cow will yield when she can drink all the water she wants, exactly WHEN SHE WANTS IT.

It is estimated that a good dairy cow should drink from 14 to 18 gallons of water every day. High producing animals require much more. They simply have got to have it if they are to give their maximum production of milk.

STAR WATER BOWLS operate under any pressure, are strictly sanitary, are easily cleaned and are equipped with **slanting valve lever that never sticks or clogs**. As shown in the picture above the tip of the valve lever clears the bottom of the bowl by nearly an inch, even when it is pressed back as far as it will go. You could throw a double handful of gravel into the STAR BOWL and it would not stop the working of the slanting valve lever. Write for special booklet.

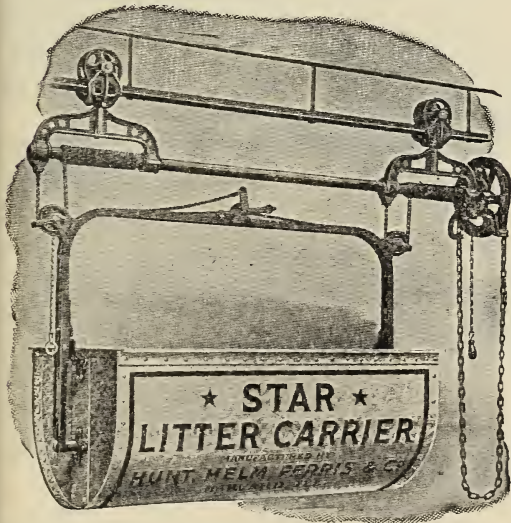


No. 850 Star Sanitary Water Bowl, complete ready for piping, \$4.75.

Special prices on complete outfit of bowls for barn.

NOTE—We will gladly give estimates for complete installation of pipe and fittings necessary for equipping any barn with Star Water Bowls.

STAR LITTER CARRIER No. 333



The carrier pictured at left is the fastest and easiest raising and lowering carrier made. The main shaft is supported at four points, all roller bearing, and the large drive wheel fitted with an endless chain is attached directly to it, no gearing or cogs to become worn or loose.

The large tracker wheels are roller bearing and run on a rigid track. It runs easily.

This, like all Star Carriers, has a rigid bail which holds the tub in shape and insures perfect working of the locks at both ends.

The tub is of heavy galvanized steel, reinforced with angle bars.

The tub can be unhooked from the conveyor and replaced with feed tub.

With No. 2, 6 bu. Tub, weight, 91 lbs.,
\$49.75.

With No. 4, 8 bu. Tub, weight 93 lbs.,
\$51.25.

With No. 6, 10 bu. Tub, weight, 95 lbs.,
\$53.75.

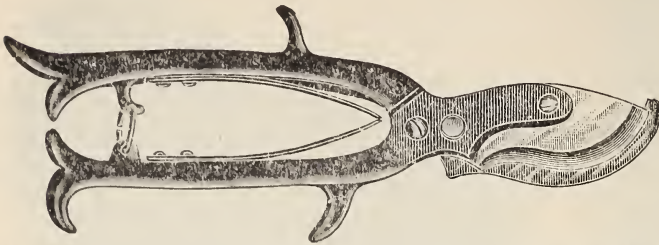
With No. 8, 12 bu. Tub, weight, 130 lbs.,
\$58.75.

Star Rigid Double Angle Steel Track for No. 333 Carrier, Price per foot31c
Fig. 414, Lag Screw Hangers, 10 1/4 inches long, price each20c
Fig. 361 Wall Bracket for fastening ridge pole to barn, price each\$2.35
Fig. 337 Two Way Switch for No. 444 Steel Track, weight 26 lbs., price each\$7.75
Fig. 337 Three Way Switch for No. 444 Steel Track, weight 29 lbs., price each\$10.75
Curves for Star Double Angle Steel Track are made on 4-foot radius. Each curve takes place of 8 foot track. Weight 12 lbs. Price each2.15

WRITE US FOR PLANS AND PRICES ON ANY BARN EQUIPMENT

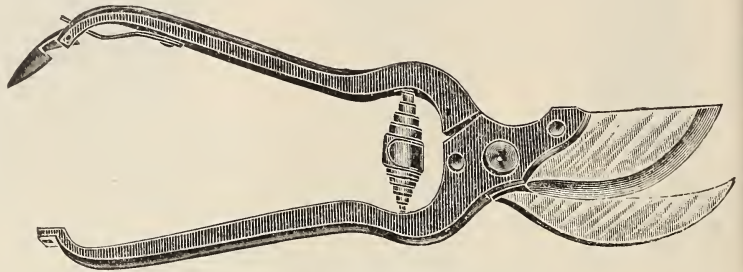
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PRUNING TOOLS, TREES AND POT LABELS

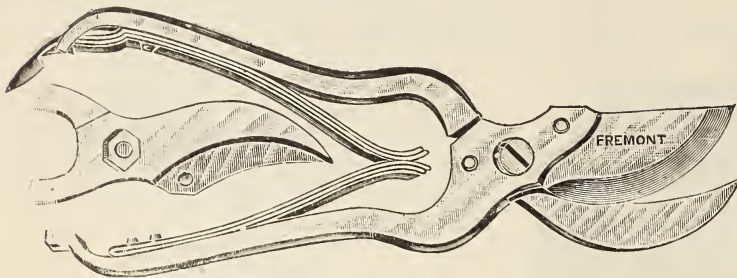


No. 533 with Volute Spring only in place of brass as shown in cut.

No. 100 Boker—9-in. black lacquered finish; forged steel frame; crucible steel polished blade riveted on; end catch and hook; wt. 1 lb. Price \$5c.



No. 100 Boker



Swiss Pattern

No. 103—9-in. Special finish forged steel frame. Highest grade crucible; steel blade and hook; polished and tempered. Ratchet tightening nut. Weight, 1 lb., Price \$1.90

Boker—6-inch, same as No. 103, except it has a Volute spring. Weight, 1 lb. Price \$1.50.



LONG HANDLE TREE PRUNERS

Long Handle Tree Pruners

Indispensable in pruning tall trees.

6 feet	-----	\$1.75
8 feet	-----	2.00
10 feet	-----	2.25

Extra Blades, 25c each.

BUDDING KNIVES

No. 8—Ebony handle, stationary ivory bark opener. Price ----- \$1.50

BRANCH SHEARS

All about 3-foot handles.
Cronk No. 130—A very good shear. Price \$2.50.
Standard pattern for light work. Price, \$1.40.
work. Price ----- \$1.25

TREE AND POT LABELS

Painted Copper Wired Tree Labels—
Per 100, 35c; per 1000, \$3.00
Painted Tin Wired Tree Labels—
Per 100, 30c; per 1000, \$2.45

Pointed Pot Labels—
4-inch, per 100, 25c; per 1000 ----- \$2.35
5-inch, per 100, 30c; per 1000, ----- 2.75
6-inch, per 100, 35c; per 1000 ----- 3.10



PRUNING SAW

Straight—16-inch blade ----- Price, \$1.50
Crescent—14-inch blade ----- Price, \$1.60

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

GARDEN TOOLS

GARDEN TROWELS—Continued

GARDEN TROWEL—Continued

Socket shank stamped steel blade and shank in one piece.

H167, small, 15c.

H168, medium, 20c.

H170, large, 30c.



NORCROSS ADJUSTABLE CULTIVATOR HOE

Like a human hand the fingers of the "Norcross" work closely around the plants without injury. Keeps down weeds, saves moisture, leaves the ground level.

Five prong for regular garden work, 4-ft. handle; weight 4 lbs. Price \$1.15.

3-prong "Midget," 9-inch handle, for flowers or close hand work; weight 1 lb. Price, 55c.



Hazeltine

Hazeltine—Slight oval spring steel blade. Polished lower side, chisel pointed for digging, hardwood handle 4½ in. long. Price, 80c.



Excelsior

Excelsior—Weight ½-lb. Price, 15c.

GRASS HOOKS

Village Blacksmith—Extra heavy blade, best tool steel. No. 4, Price, 65c.

Village Blacksmith—No. 3 Price 75c.

HEDGE SHEARS

Hedge Shears, Stiletto—9-in. blade. Price, \$3.50.

Michigan

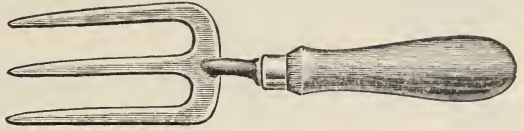
Michigan—Used in beet fields or as a shuffle hoe for flower beds. Steel blade 4½-in. Price, 25c.

Lang. Weeder—Weight. ½-lb. Price. 60c.

GARDEN TROWELS

Solid blade, socket and handle of one piece forging. A practical, indestructible trowel.

No. 80. Price 25c.



GEM

Hand forged steel, tempered, polished, flat steel tines; bronzed cap and shoulder, hardwood handle. Price, 15c.

NOTE—We sell Plants for transplanting in their season. Cabbage plants, Cauliflower plants, Asparagus and Rhubarb roots, Tomato and Celery plants, Pansy plants, Potted plants.



Simplex Simple Durable

Rapid Efficient Price, \$1.25.

No. 56VB—Grass shears. Price, 80c.



GRASS SHEARS

No. 51 Village Blacksmith — Grass shears. Price, \$1.10.



A first Quality improved edger, strong and durable. It's a pleasure to use a good tool of this make.

No. 2 Planet Jr. Lawn Edger, \$2.00.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

GARDEN TOOLS—Continued

Combination Spring-Tooth
MAGIC WEEDER HOES

For all Members of the Family and all Conditions of the Soil.

SAVES TIME AND STRENGTH

LIGHT IN WEIGHT

THEY TURN WORK INTO A PLEASANT PASTIME

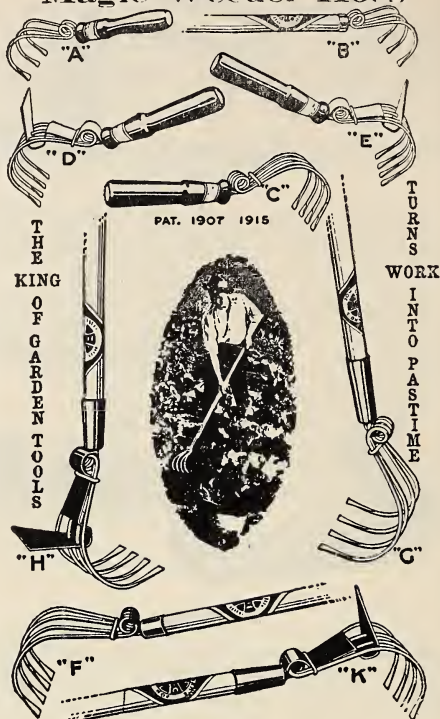
Style A—Has 3 prongs; width, 2 inches; length, 9 inches. **Price each, 15c.**

Style B—Has 3 prongs; width, 2 inches; length 22 inches. **Price each, 25c.**

Style C—Has 4 prongs, width, 3 inches; length, 10 inches. **Price each, 35c.**

Style G—Has 4 prongs; width 5 inches; length, 57 inches. **Price each, 85c.**

Only the four styles as listed above are carried in stock.

REICHARD'S
COMBINATION SPRING-TOOTH
Magic Weeders HoersUSE THE
MULTITOOL

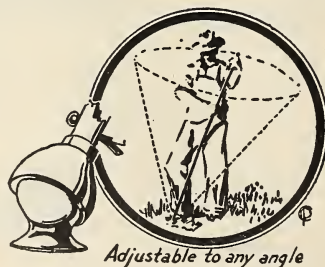
**"THE BALL-BEARING HOE" IN GARDENS,
LAWNS, FIELDS**

The MULTITOOL consists of 5 Reversible and Interchangeable blades, combining 18 cutting edges, together with a Universal joint at the end of a 5 foot handle.

One man with a Multitool will accomplish twice the work of one man with a hoe. Changing of blades is accomplished by removing one screw.

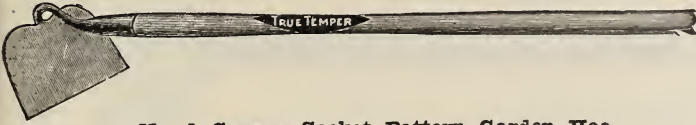
Many Tools are entirely replaced by the "Multitool" including all classes of **Hoes Garden Cultivators, Rakes, Pruning Tools and other Lawn Tools** and many other tools. Scientifically built for service and Guaranteed to do twice the work of ordinary hoes with less labor. Total weight of the handle and 5 blades is 3 pounds.

Price, Multitool Complete, 5 blades, \$5.00. Ex. Handle Assembly, \$2.25.



SPECIAL MULTITOOL DESCRIPTIVE CIRCULAR MAILED ON REQUEST

GARDEN TOOLS—Continued

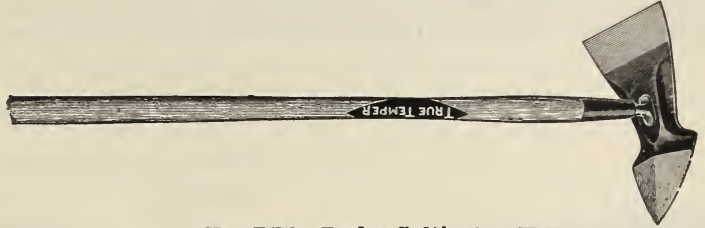


No. 1 Geneva Socket Pattern Garden Hoe

No. 1—Geneva Socket pattern garden hoes, assorted $6\frac{1}{2}$ to $7\frac{1}{2}$ -inch blades, XX selected handles; gold bronze finish. Price, \$1.00.

No. 1—Oxford Socket pattern. $6\frac{1}{2}$ to $7\frac{1}{2}$ -inch blade X selected handle. Price, 90c.

No. BB6—Beebe Cultivator Hoe, with 6-inch polished steel blade riveted to malleable iron shank; handle $4\frac{1}{3}$ feet. Price, 90c.



No. BB6—Beebe Cultivator Hoe



Warren Hoe

Warren Hoes—Polished steel blades, socket pattern; $4\frac{1}{3}$ foot handle.

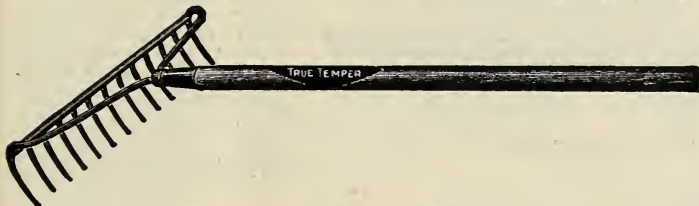
No. W7—7-inch blade. \$1.10.

No. W7 $\frac{1}{2}$ — $7\frac{1}{2}$ -inch blade. \$1.15.

No. A—Acme Weeding Hoe; polished steel blade, riveted to malleable iron shank; width of blade, $4\frac{1}{2}$ inches; $4\frac{1}{3}$ foot handle. Price, \$1.20.



No. A Acme Weeding Hoe



No. B14—Garden Rake

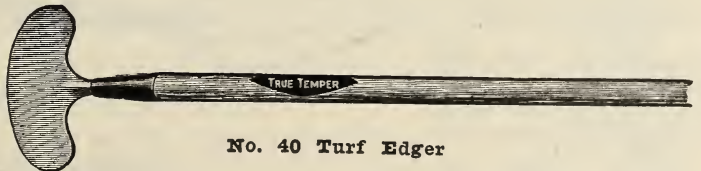
Garden rakes—Steel curved teeth; solid end bows; the very best garden rake.

No. B12—12 tooth. \$1.15.

No. B14—14 tooth. \$1.25.

No. B16—16 tooth. \$1.35.

No. 40—Turf edger, polished steel blade; solid shank; 4 foot handle. \$1.05.



No. 40 Turf Edger



Socket Strap Spade

Size 2—Socket handle spade; solid cast steel polished blade, $7\frac{1}{4}$ x12 inches; long handle. \$1.50.
Size 2—Socket handle spade; solid cast steel polished blade, $7\frac{1}{4}$ x12 inches; D handle. \$1.50.

We Carry All Kinds of Implements For the Farm and Garden

Prices Subject to Change Without Notice

SHOVELS, FORKS, ETC.



Champion, Size 2, Shovel

Myers, Size 2 Shovel—With solid crucible steel polished blade $9\frac{1}{2}$ x $11\frac{3}{4}$ inches long handle, round point. Price -----\$2.50

Champion, Size 2—Long handle, round point shovel; polished blade, $9\frac{7}{8}$ x $11\frac{1}{8}$ inches; solid cast steel; socket strap \$1.50.

Champion, Size 2—D handle; round point shovel; polished blade, $9\frac{7}{8}$ x $11\frac{1}{8}$ inches; solid cast steel; socket strap. \$1.50.

Champion, Size 2—Square point solid crucible cast steel; polished blade, $9\frac{7}{8}$ x 12 inches; long handle. \$1.50.

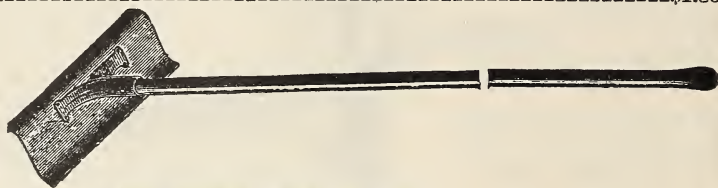


No. 3—Barn Scoop

No. 3 Barn Scoop—Long handle; square point; width at mouth, $11\frac{1}{2}$ inches; length of blade, $15\frac{1}{2}$ inches -----\$1.85

No. 3 Barn Scoop—D handle; square point; width at mouth, $11\frac{1}{2}$ inches; length of blade, $15\frac{1}{2}$ inches -----\$1.85

The push & pull scraper is one of the latest tools on the market for cleaning the dairy barn. Does it quicker and easier than the barn shovel and does better work. \$2.00.



Barn Scraper, Push and Pull



No. 035B—3 Tine Hay Fork

No. 035B—3 Tine Hay Fork; three oval tines; strap ferrules; polished handle; gold bronze finish; handle, $4\frac{1}{2}$ ft. \$1.25.

No. 045B—4 Tine Hay Fork; four oval tines; strap ferrules; polished handle; gold bronze finish; handle, 5 ft. \$1.35.

No. 044 $\frac{1}{2}$ —4 tine Manure Fork; four oval steel tines; strap ferrules; bent polished handle; gold bronze finish; handle, $4\frac{1}{2}$ ft. \$1.75.

No. 054 $\frac{1}{2}$ —5 Tine Manure Fork; 5 oval steel tines; strap ferrules; bent polished handle; gold bronze finish; handle, $4\frac{1}{2}$ ft. long. \$1.95.

No. 064 $\frac{1}{2}$ —6 Tine Manure Fork; 6 oval steel tines; strap ferrules; bent polished handle; gold bronze finish; handle, $4\frac{1}{2}$ ft. long. \$2.25.

D Handle Manure Forks Same Sizes and Prices as Long Handle.

No. 044 $\frac{1}{2}$ —Four Tine Manure Fork

SPADING FORKS

No. OH-4—Spading fork; four heavy angular steel tines; strap ferrules, bent polished handle; gold bronze finish. Handle, 4 ft. -----\$1.50.

D Handle spading fork same size and price as long handle.

HAND POTATO AND CORN PLANTERS AND BROADCAST-CAST SEEDER

The Eureka Potato Planter

A Tube Planter with self-locking jaws and a broad adjustable depth gauge. The object of the tube is to obviate the necessity of raising the planter for the purpose of depositing the potato in the beak, which makes it an easy and good way of planting potatoes. The operation of this planter is very simple and it cannot get out of order; if you try one you will like it.

Eureka Potato Planter, net weight $3\frac{1}{2}$ lbs. \$2.00

The Pingree Patent Potato Planter

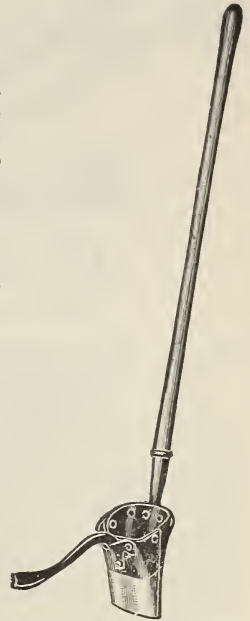
Simple, strong, durable, easy to operate, has self-locking jaws and adjustable depth gauge. At one operation the holes are made, seed dropped and covered. Plants uniformly any depth desired. It will pay you well to try one of these ingenious labor savers.

Pingree Patent Potato Planter, net weight 3 lbs.

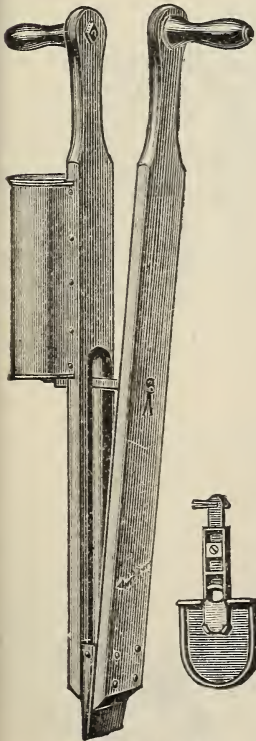
----- \$1.35



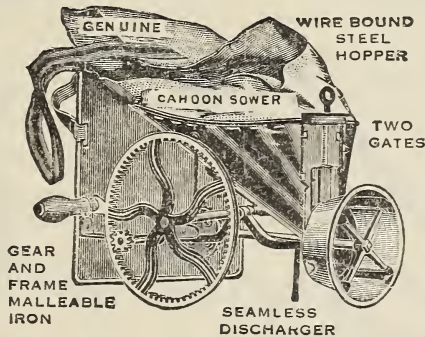
The Eureka
Potato Planter



The Pingree
Potato Planter



The Acme
Corn Planter



Cahoon Broadcast Seeder

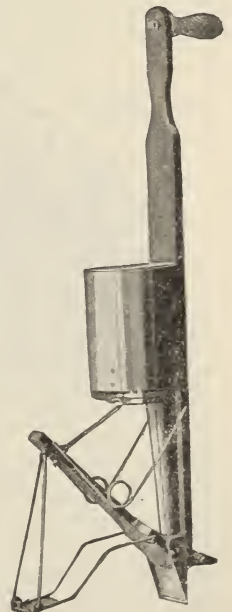
CAHOON—The standard broadcast seed sower of the world, made of steel, iron and brass and with ordinary care will last a lifetime. This is the most popular and best built seed sower; has a force feed and does excellent work. Instructions with each machine. Weight 9 lbs. Price, \$5.75.

THE ACME CORN PLANTER

A two-handed planter, light, strong and durable. Especially adapted for planting in heavy, cloddy or stony soils. Will drop seed ranging from popcorn to large kidney beans. Weight 5 lbs. Price \$1.35.

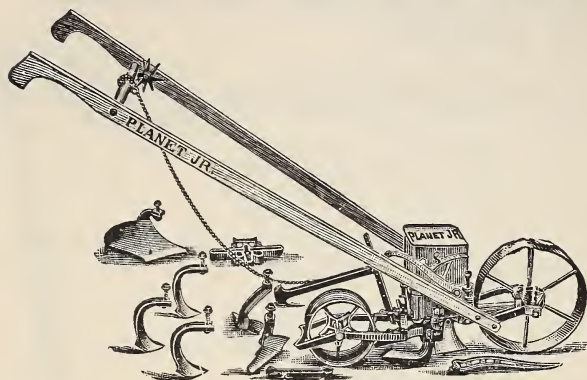
THE ROTARY CORN PLANTER

A one-hand planter, extremely accurate of drop, due to the novel design of the seed plates and steel spring cut-off. Simple, strong and durable. No tools required to make adjustments. Rotary Corn Planter, weight 6 lbs. Price, \$2.75.



The Rotary

PLANET JR. GARDEN TOOLS



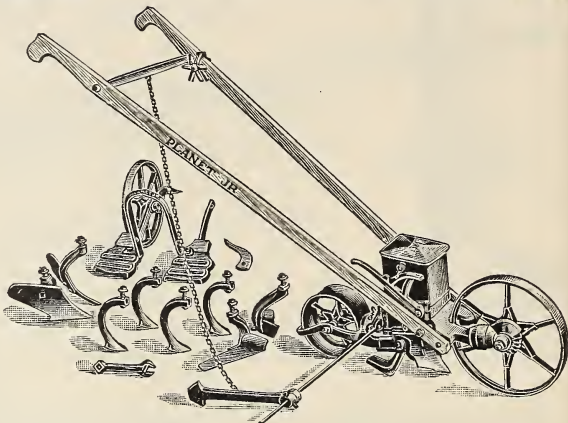
No. 25 Planet Jr. Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow

This combined Hill and Seed Drill Seeder and Double Wheel Hoe is fitted with 11¼-inch wheels. Hopper holds 2¼ quarts. It combines in a most practical way the Planet Jr. No. 4 Drill and No. 12 Double Wheel Hoe. The change from drill to wheel hoe and back again is quickly made, and the entire combination is one we can heartily recommend and guarantee satisfactory.

Equipment: One pair 6-inch hoes; four cultivator teeth; one pair plows; two leaf lifters.

Price, complete -----\$23.00

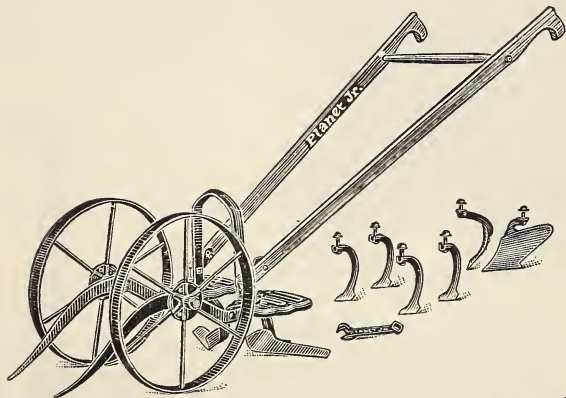
Weight, packed, 59 pounds.



No. 12 Planet Jr. Double Wheel Hoe, Cultivator and Plow

Equipment: One pair 6-inch hoes, four cultivator teeth, one pair plows and one pair leaf lifters. Weight, packed 32 lbs.

Price -----\$12.00



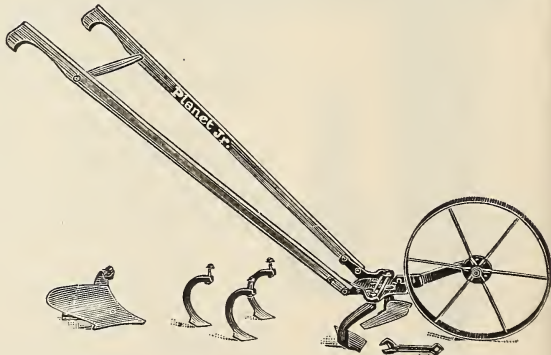
No. 17 Planet Jr. Single Wheel Hoe

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

Weight, 24 lbs.

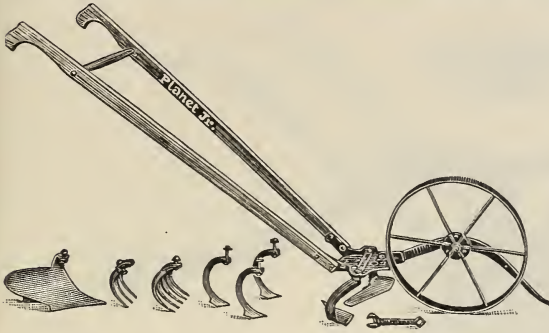
Price -----\$8.00

No. 17½ Planet Jr. is the No. 17 Cultivator less the plow. Weight, 22 lbs. Price -----\$7.25



SPECIAL PLANET JR. CATALOG SENT ON REQUEST

PLANET GARDEN TOOLS—Continued

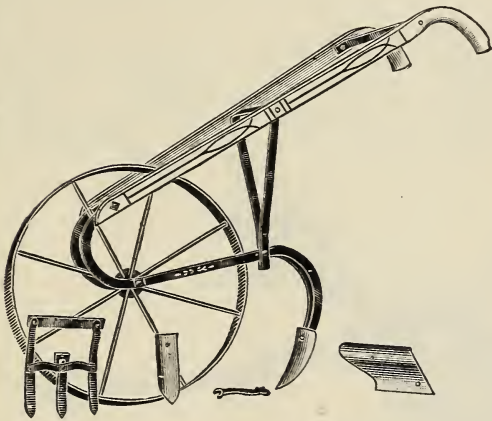
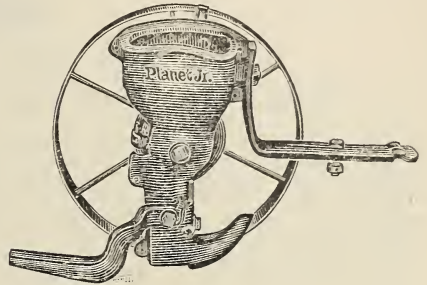


No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow

Packed weight, 26 lbs.
Steel frame.
15-inch steel wheel.
Equipment:
One pair of 6-inch hoes.
Three cultivator teeth.
One large garden plow.
All oil tempered.
One 7-inch rake.
One 4-inch rake.
One leaf guard.
Price, \$9.75.

No. 35 Planet Jr. Seeder Attachment

The No. 35 Seeder Attachment is proving very popular with the man who wants an inexpensive seeder and has only small amount of work for it. Can be attached to almost any hand cultivator. Price \$6.75.



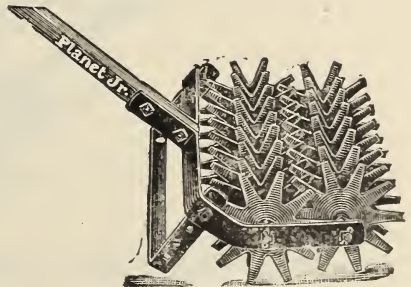
No. 20 Garden Plow and Cultivator

No. 20 STANDARD GARDEN PLOW AND CULTIVATOR

A light, strong and serviceable Garden Plow, Cultivator, Hoe and Rake. Made of steel throughout. Wheel is 24 inches in diameter. Equipment includes plow, sweep, reversible shovel, rake and wrench. Weight 20 lbs. Price \$5.50.

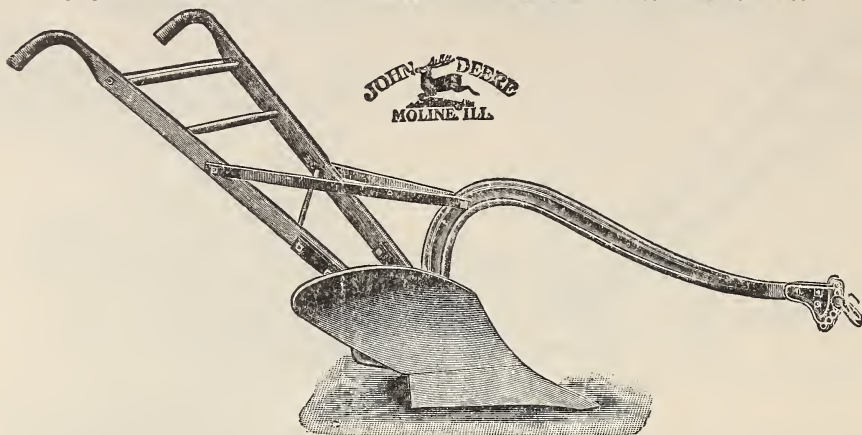
PLANET JR. STAR PULVERIZER, LEVELER AND WEEDER

This new tool is especially adapted for preparing the seed bed. After the ground has been plowed with the Wheel Hoe plow or spaded, this Pulverizer will be found of great value in smoothing and fining the surface of the soil, putting it in the best possible condition for the seed planter. It is much more thorough and rapid in its work than an ordinary garden rake, thoroughly pulverizing lumpy soil. Use like a carpet sweeper or vacuum cleaner with sufficient pressure to cut the lumps and thoroughly pulverize the soil. The rear blade cutting 13½ inches levels the ground perfectly. After the crops are started it may be used between the rows as a weeder or as a crust breaker, leaving a fine mulch. It is a great tool for the small garden, while the vegetable grower will find many uses for it, especially under the laterals in overhead irrigation. Works equally well both forward and backwards. Weight 13 lbs. Price, \$6.75.



Planet Jr. Pulverizer

JOHN DEERE STEEL WALKING PLOWS



John Deere New Turf and Stubble Plow—Steel Beam

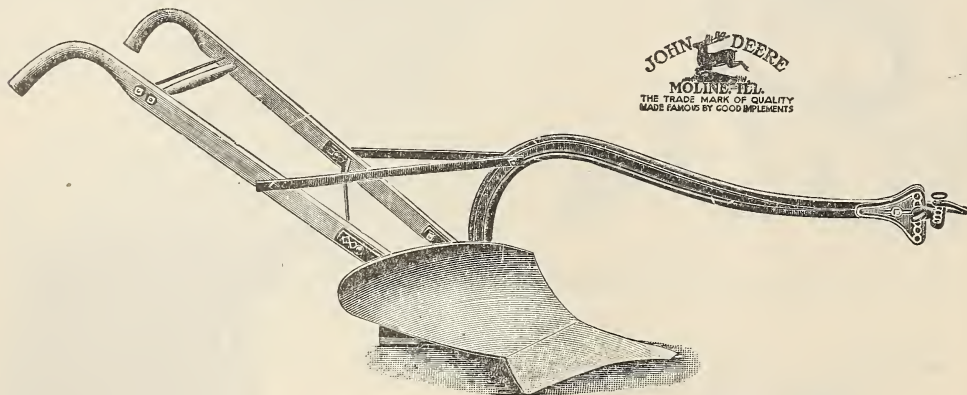
This series of plows is made upon a new theory of plow surface, cut and turn. They embody all the excellencies of high-grade plows. The furrow-slice is lifted and carried unbroken along the surface of the plow bottom until it reaches the wing of the moldboard, where it is inverted, whereby the second turning and pushing forward of the dirt in front of the plow is avoided. This principle increases the scouring qualities, effects a saving in draft for the team, and leaves a clean furrow.

The turf and stubble plows of this series have a moldboard with a long, easy turn, which makes the plows easy draft and equally adapted for old ground or sod. In the latter, they lap the furrows with great regularity and leave ground in good condition for the harrow.

Steel Frame—Hardened soft-center steel share, double shin.

Hardened soft-center steel landside, chilled slip heel; hardened soft-center moldboard, double shin; double headed steel beam, high curve.

GP 4N—Steel Beam Plow; cuts 12 inches; weight, 103 lbs.	Price -----	\$25.25
GP 6N—Steel Beam Plow; cuts 14 inches; weight, 115 lbs.	Price -----	28.00
GP 7N—Steel Beam Plow; cuts 16 inches; weight, 131 lbs.	Price -----	31.25



John Deere New Mixed Land Series—Steel Beam

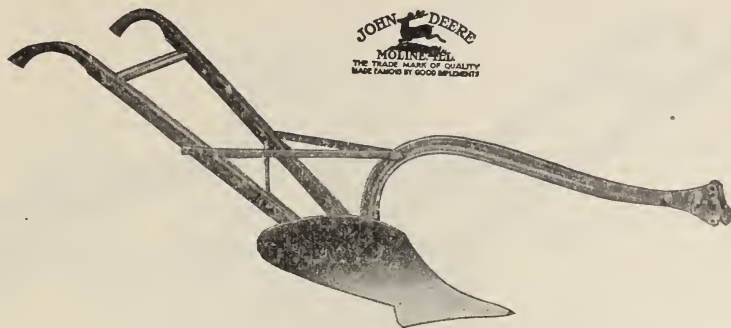
As the name indicates, these plows are adapted for use in soils of a mixed composition of sand and clay, or light loam, where steel of a very high temper is not required in order to scour. They are built on the general purpose pattern, for either sod or stubble plowing.

They are good substitutes for chilled iron plows and are more easily handled. Their general qualities and medium price make them a popular series.

B110—Steel Beam Plow; cuts 10 inches; weight, 94 lbs.	Price -----	\$22.75
B112—Steel Beam Plow; cuts 12 inches; weight, 107 lbs.	Price -----	25.25
B114—Steel Beam Plow; cuts 14 inches; weight, 124 lbs.	Price -----	27.75

PRICES SUBJECT TO CHANGE WITHOUT NOTICE—ALL IMPLEMENT PRICES ARE ADVANCING

JOHN DEERE STEEL WALKING PLOWS—Continued



John Deere Bantam Steel Plow

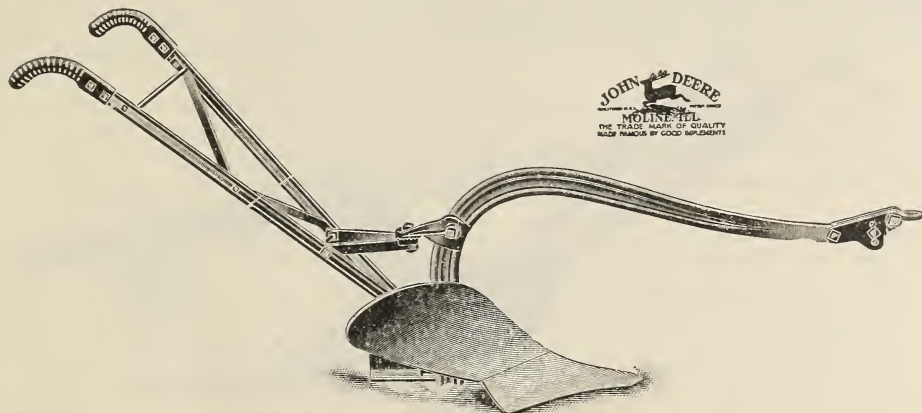
This is a light and graceful one-horse plow for general cultivating and garden work. It is very strong and durable. Has a hardened soft center moldboard and a steel share.

8-inch Steel Beam Steel Bantam Plow, cuts 8 inches; weight, 65 lbs. Price -----\$14.50

9-inch Steel Beam Steel Bantam Plow, cuts 9 inches; weight, 71 lbs. Price ----- 16.50

10-inch Steel Beam Steel Bantam Plow; cuts 10 inches; weight, 77 lbs. Price ----- **19.25**

Above with Extra Share



CV8 John Deere Vineyard Plow

This is the most popular style of vineyard plow made. It is a small steel beam plow, equipped with an index beam, which allows the horse to walk away from the vines and at all times permits of a direct hitch to the end of the beam. The handles are steel, swiveled either way, to prevent scraping the hands on vines or shrubbery. With this plow work can be done very close to the vines.

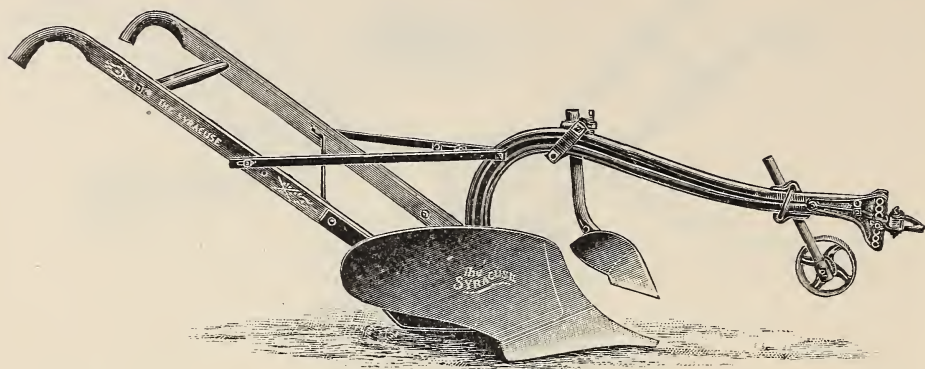
It has a cast landside, cast steel slip share, steel frame and a hardened soft center steel moldboard with extra share.

CV-8—Adjustable Steel Beam Plow, cuts 8 inches; weight, 83 lbs. Price -----\$18.00

The user of a John Deere Plow can always get repairs.

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ARE ADVANCING**

SYRACUSE PLOWS



SYRACUSE CHILLED PLOW—STEEL BEAM

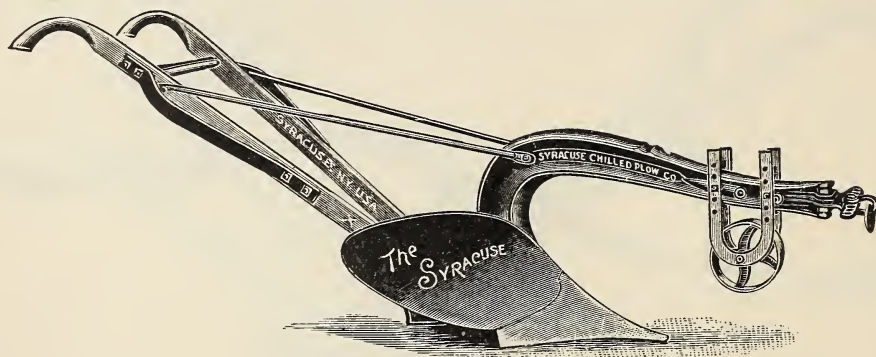
The plows of this series have a sloping landside, and moldboard of special design as to produce light draft and adapt the plows to either sod or stubble plowing. Strength with simplicity has been kept in mind in their construction as well as quality of material, the result being that these chilled plows are an improvement on all plows of this character heretofore manufactured. The share and shin piece is combined, a fresh cutting edge where it is most needed being thus obtained with each new share.

No. 1466 Steel Beam Chilled Plow; cuts 8 inches; weight, 64 lbs.	Price -----	\$13.00
No. 1465 Steel Beam Chilled Plow; cuts 9 inches; weight, 72 lbs.	Price -----	15.00
No. 1464 Steel Beam Chilled Plow; cuts 10 inches; weight, 81 lbs.	Price -----	17.25
No. 1463 Steel Beam Chilled Plow; cuts 12 inches; weight, 101 lbs.	Price -----	19.25
No. 1462 Steel Beam Chilled Plow; cuts 13 inches; weight, 121 lbs.	Price -----	20.75
No. 1461 Steel Beam Chilled Plow; cuts 14 inches; weight, 127 lbs.	Price -----	21.75

One extra share furnished with each plow.

NOTE—Guage wheels and cast jointers are extra.

We also carry in stock Syracuse Side-Hill Plows in 10 and 12-inch sizes.



No. 1—Syracuse Contractor's Plow

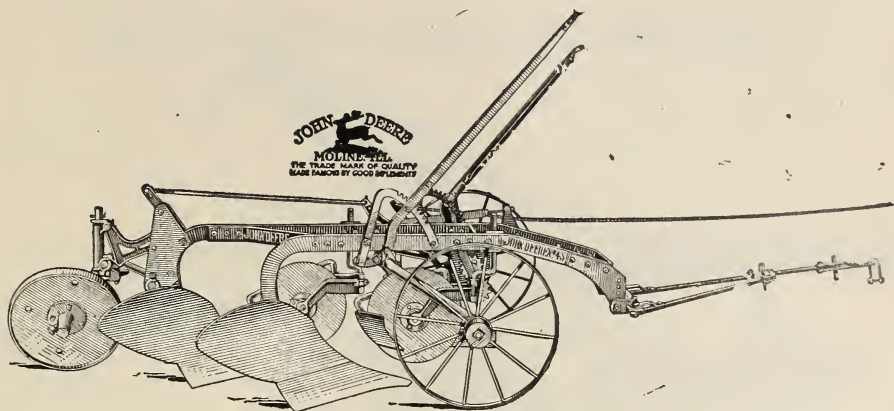
Hard iron wearing parts. Extra heavy beam, share and strip. Steel wheel frame. Loop handle wear irons. Will turn a furrow 5 to 9 inches deep, and 12 to 15 inches wide. An excellent plow for general grading purposes.

No. 1—Syracuse Contractor's Plow; weight, 205 lbs. Prices on application.

Extra Share for No. 1466 Plow -----	1.05
Extra Share for No. 1465 Plow -----	1.25
Extra Share For No. 1464 Plow -----	1.40
Extra Share For No. 1463 Plow -----	1.45
Extra Share For No. 1462 Plow -----	1.60
Extra Share For No. 1461 Plow -----	1.70
Extra Share For No. 1 Grader -----	1.50

USE A SYRACUSE PLOW—YOU CAN ALWAYS GET REPAIRS

PRICES SUBJECT TO CHANGE WITHOUT NOTICE—ALL IMPLEMENT PRICES
ARE ADVANCING



John Deere No. 45 Tractor Gang Plow

The No. 45 is a new type of John Deere tractor plow with features that every owner of a "two-plow" tractor will appreciate. It was designed by John Deere plow specialists to meet the demand for a tractor plow of extremely light weight without sacrifice of the strength and durability necessary to stand the strain of utilizing "two-plow" tractor power in all plowing conditions.

Use of Special John Deere Steel Makes This Strong, Light Plow Possible.

To secure the desired combination of extreme lightness and great strength special steel was developed. The beams, braces and axles of the No. 45 are considerably smaller and lighter than the corresponding parts used in making the heavier types of two-bottom plows. Yet the strength of heavier construction is secured.

Beams Guaranteed Not to Bend or Break—You will find this guaranty stamped on the beams.

All Frame Connections Are Hot-Riveted—To secure for the entire frame the great strength and durability that each part has, all connections are hot-riveted. That assures a rigidity you are sure to appreciate. The frame has no loose joints to cause unnecessary wear. It will not give way anywhere.

Pulls Extremely Light—Light draft means more work in the same time with less tractor power. The No. 45 pulls extremely light because of light weight, proper alignment and most of all because of the scouring qualities and general high-grade construction of its John Deere bottoms. Until you have seen this plow at work, you can hardly appreciate how light it pulls.

Simple and Powerful Lift—A clutch on the axle engages the land wheel, forcing the plow in or out of the ground at the end of the field. A pull on the trip rope by the operator releases the clutch for action. The clutch has one stop dog and, when lifting travels a full revolution. The gears used on the lift make this simple construction possible. At the same time the lifting power is greatly compounded, making it possible to use a light land wheel and requiring very little traction to lift the plow. The lift works perfectly. There is no danger of dirt or trash interfering with its action.

High and level lift—The plow rises straight up on all three wheels. The bottoms are high and level—the shares do not gather trash when turning at the end of the field or when transporting.

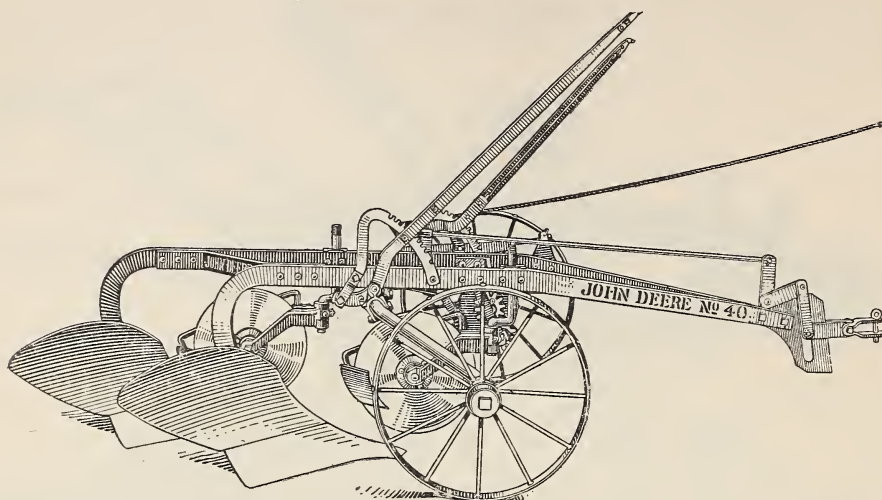
Levers are easily reached by the tractor operator. One lever is used for controlling the depth; the other for leveling the plow.

Widely Adjustable Hitch both vertically and horizontally permits hitching the No. 45 to any standard two-plow tractor. The hitch has a break-pin for protecting the plow when striking a stone or root. A slide and pin lock provides quick landing adjustment.

A Simple Reliable Plow—The Kind You Need—You will find the No. 45 a typical John Deere plow. It does good work—the kind of work that farmers have learned to associate with John Deere plows. Remember, nothing in plow qualities will take the place of good work. Unless a plow does its seed bed-making properly, you cannot afford to own it, regardless of the price.

No. 45 John Deere Tractor Gang Plow, weight 600 lbs. -----\$118.50

PRICES SUBJECT TO CHANGE WITHOUT NOTICE—ALL IMPLEMENT PRICES ARE ADVANCING



No. 40 John Deere Tractor Gang Plow For Fordson Tractor

John Deere Has Built the Plow You Have Been Wanting

Owners of Fordson and Sampson tractors have been wanting a special plow. They asked for a plow much lighter than usual—a plow, the weight of which would be in keeping with the light “two-plow” tractors.

Naturally, however, they wanted this light weight without sacrifice of the strength and durability necessary to enable the plow to stand the strain of utilizing their tractor power under all conditions. And they wanted thorough seed bed-making all the time.

John Deere plow specialists concentrated their great resources on building such a plow. They took as a basis the standard John Deere bottoms that have made John Deere plows famous everywhere for giving the user the greatest final returns on his investment. Their purpose was to give the user the advantage of these bottoms on a plow perfectly adapted to light “two-plow” tractors. The No. 40 is the result.

To secure the desired combination of extreme lightness and great strength, special steel was developed. Thorough tests showed that this special John Deere steel permits the desired reduction in size and weight of parts without impairing strength. The No. 40's beams, braces and axles are considerably smaller and lighter than the corresponding parts used in making the heavier types of two-bottom plows. Yet the strength of heavier construction is secured. The beams, which take most of the strain in plowing, are guaranteed not to bend or break. You will find this guaranty stamped on the beams.

A new improvement to the John Deere No. 40 Tractor Plow is the self-adjusting hitch. This important feature is original and exclusive. The hitch, being connected to the depth lever, automatically rises or lowers to the proper line of draft whenever the depth of plowing is changed with the lever. No vertical hitch adjustment by the operator is necessary.

Automatically the plow maintains the proper line of draft, and the bottoms continue to run true and level when the depth is varied.

The self-adjusting hitch, with flexible link clevis, is a feature that every user will greatly appreciate. It is a big advantage that goes with extreme light weight, light draft and great strength in making the John Deere No. 40 “the plow that fits the Fordson.”

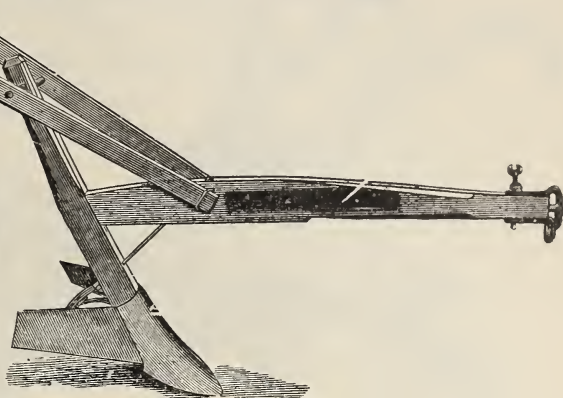
No. 40 John Deere Tractor Gang Plow, weight 490 lbs. -----\$100.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE—ALL IMPLEMENT PRICES
ARE ADVANCING

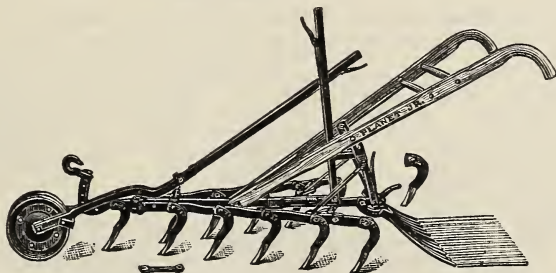
SHOVEL PLOWS AND CULTIVATORS

WOOD BEAM WING SHOVEL PLOW

These are admirable tools for hilling potatoes, etc. Have adjustable wings which can be let out to any desired angle by means of punched spread-rods, and can be worked with one wing or the two wings simultaneously at different angles.



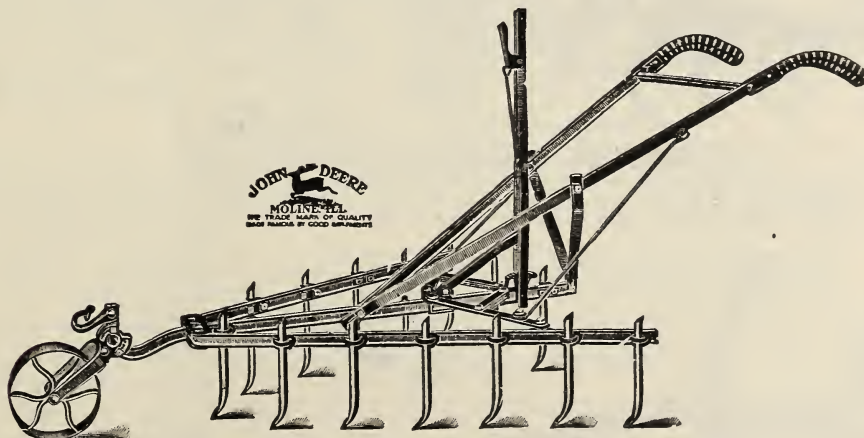
Wood Beam. Wing Shovel Plow; weight, 35 lbs. Price -----\$6.00
Steel Beam, Wing Shovel Plow; weight, 40 lbs. Price ----- 6.50



12-Tooth Harrow with Wheel and Pulverizer

The combination of teeth and pulverizer leaves the ground in the finest condition. The lever wheel enables the operator to set the teeth exactly to any depth desired, making delicate work not only possible, but very easy. It is invaluable in narrow rows and for fine work in market gardens, and close work on the farm. Used extensively in strawberry culture.

Planet Jr. 12-Tooth Harrow, complete, weight 75 lbs. -----\$19.00
Planet Jr. 12-Tooth Harrow, without pulverizer ----- 16.00
Planet Jr. 12-Tooth Harrow, without pulverizer, but with plain wheel ----- 14.75



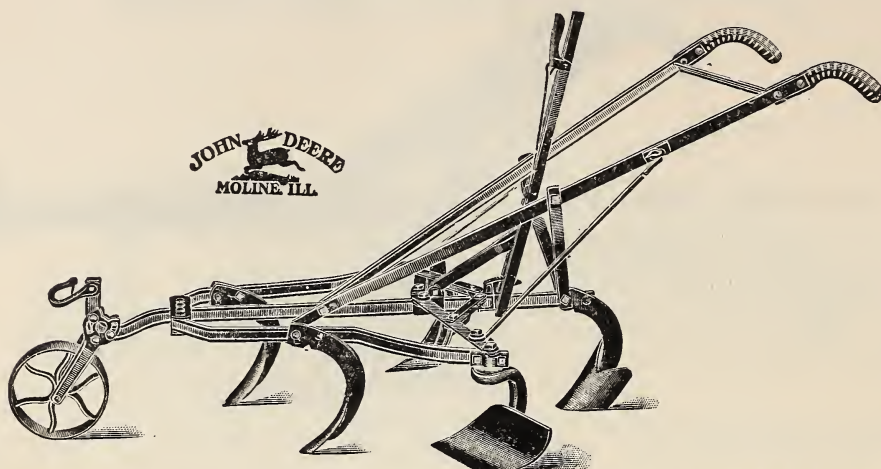
The John Deere Fourteen-Tooth Steel Combination Cultivator and Harrow is adapted for close work among very small plants. It stirs the soil thoroughly, but does not throw any on the plants.

The steel teeth are reversible, each one having a small cultivator tooth forged on one end, the other being straight and sharp.

John Deere Fourteen-Tooth Cultivator with Gauge Wheel; weight, 67 lbs. -----\$10.00

**PRICES SUBJECT TO CHANGE—WITHOUT NOTICE—ALL IMPLEMENT PRICES
ARE ADVANCING**

CULTIVATORS

**Deere Steel Five Tooth Cultivator and Horse Hoe (Shown with Horse Hoe Attached)**

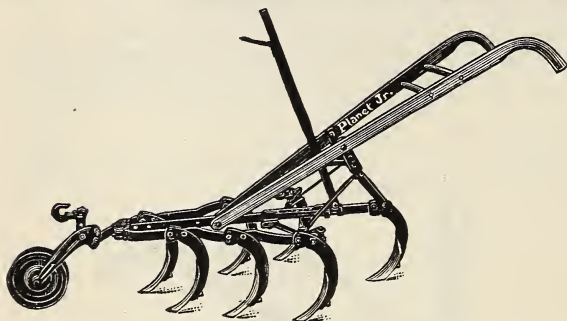
These implements, specially adapted to the use of market gardeners, as well as for general use, are made in the most substantial manner. The frames are entirely of steel and malleable iron. The expansion device is a combination of two arms which expand or contract the frame by the action of the lever, at the same time bracing the frame and making the tool very rigid. Expansion lever is of good length and easy to operate. Wrought steel braces extend from the handles to the expanding bars, being so attached to the latter that their full service is secured, regardless of the position of the expanding bars.

The shovels on the five and seven-tooth are adjustable and the horse-hoe blades reversible, which admits of a variety of work.

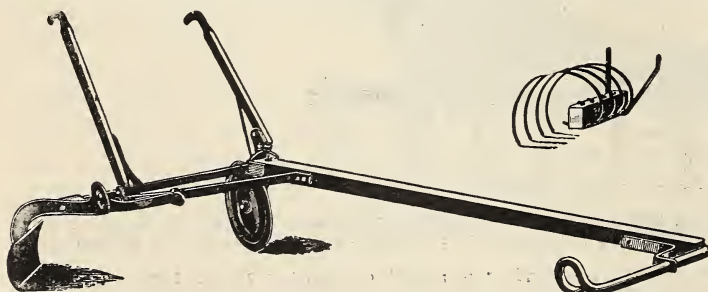
Five Tooth Cultivator with lever, and gauge wheel -----	60-lbs.	Price
Five Tooth Cultivator with lever, gauge wheel and horse hoe attachments --	65-lbs.	\$10.00
Seven Tooth Cultivator with lever, gauge wheel -----	65-lbs.	11.75
Seven Tooth Cultivator with lever, gauge wheel and horse hoe attachments --	71-lbs.	11.50
		14.75

No. 83 Planet Jr. Seven-Tooth Cultivator

The No. 83 Planet Jr. Seven-Tooth Plain Cultivator, in the opinion of those who ought to know, is the coming one-horse cultivator, as it has seven teeth instead of five. The teeth are $2\frac{1}{4}$ inches wide, and their work is finer and more thorough than that of the five-tooth cultivator. The machine is a favorite where fine cultivation is wanted. It finishes all rows up to 42 inches apart. Weight 69 lbs. Price \$18.00.

**SYRACUSE GRAPE and BERRY HOE**

The Syracuse Berry Hoe is a wonderful labor-saver in the culture of berries and grapes. The Hoe is easily guided in and out around the posts and vines by the disc castor wheel, to which the handle is attached. The horse is hitched to one side of the



pole, with plenty of room for the plow to work under the vines or bushes. By changing the position of the blade the soil can be thrown toward or away from the vines. Adjustable to any width row. Weight 120 lbs. Price \$19.75.

Cultivator and spring tooth attachments at extra price

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SPRING TOOTH AND RIDING CULTIVATORS

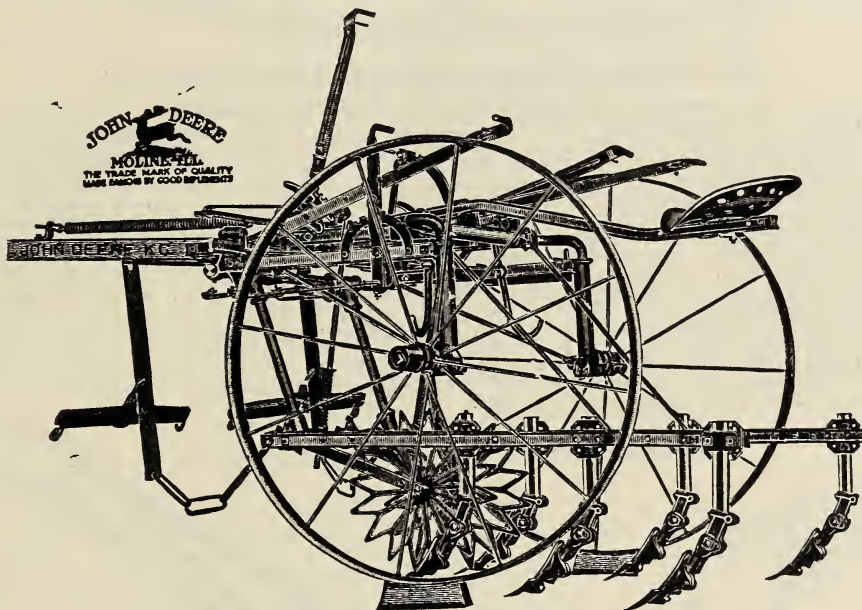
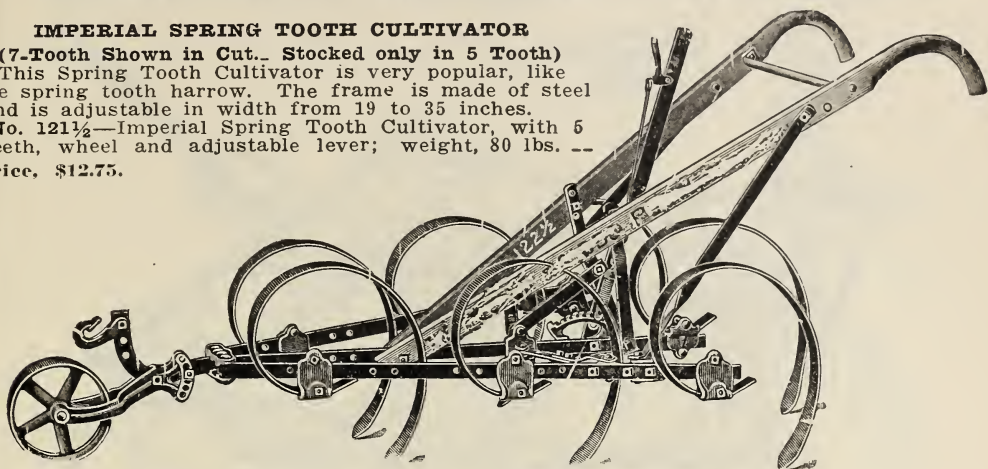
IMPERIAL SPRING TOOTH CULTIVATOR

(7-Tooth Shown in Cut.—Stocked only in 5 Tooth)

This Spring Tooth Cultivator is very popular, like the spring tooth harrow. The frame is made of steel and is adjustable in width from 19 to 35 inches.

No. 121½—Imperial Spring Tooth Cultivator, with 5 teeth, wheel and adjustable lever; weight, 80 lbs. —

Price, \$12.75.



JOHN DEERE K. C. RIDING CULTIVATOR

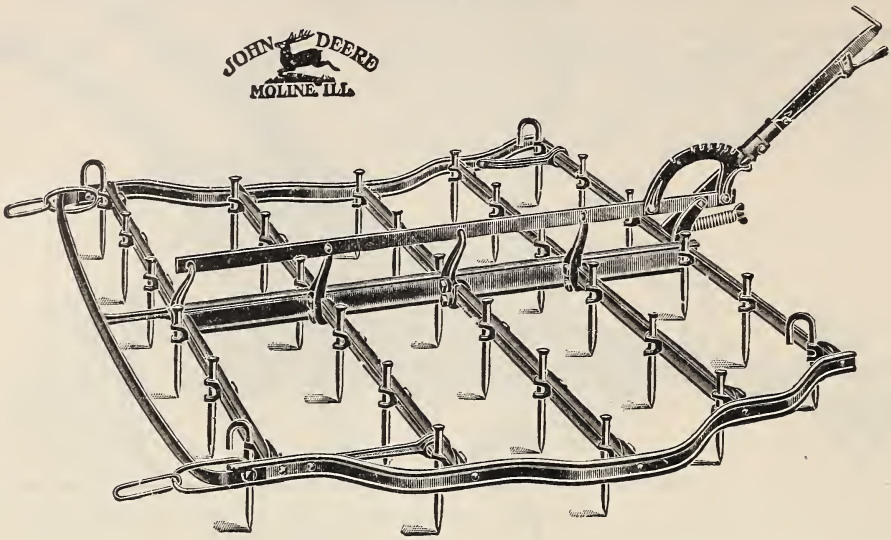
Twelve Points of Merit on the K. C. Cultivator—They are important. Read them carefully.

- 1—Easy to operate. Control is natural. You don't have to learn to like it.
- 2—Has quick dodge. Successfully used in both straight or crooked rows. Wheels and rigs respond instantly.
- 3—John Deere K. C. Cultivator cultivates thoroughly, kills the weeds, makes better mulch, raises more corn.
- 4—Does better work because parallel cultivation is always thorough and uniform. There are no "skips and jumps" when you use the John Deere K. C. Cultivator.
- 5—You can drive into the field, stay on the seat, and make all adjustments with convenient, easily-operated levers.
- 6—Master lever raises both rigs and balances machine. Shovels lift high. Pole stays down when turning. Team and operator are comfortable.
- 7—Depth levers regulate depth of cultivation accurately. You know how deep the shovels are digging on the John Deere K. C. Cultivator.
- 8—Tilting lever on end of pole levels frame and rigs. Not necessary to raise or lower shanks to make shovels run even depth.
- 9—Spacing lever regulates distance between rigs. Cultivate close or wide as conditions require.
- 10—Double ball rig hangers. Rigs penetrate level and are held to fixed position.
- 11—Hitch pulls direct from end of rigs. Makes steady running and powerful penetration.
- 12—John Deere Method Equipment. Does better work. Raises more bushels per acre. Slip-point shovels; rotating shields and sweeps are equipments that protect the plant when small and the roots when large.

John Deere K. C. Cultivator. Six Shovel Pin Break; weight 415 lbs. -----\$61.75

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HARROWS



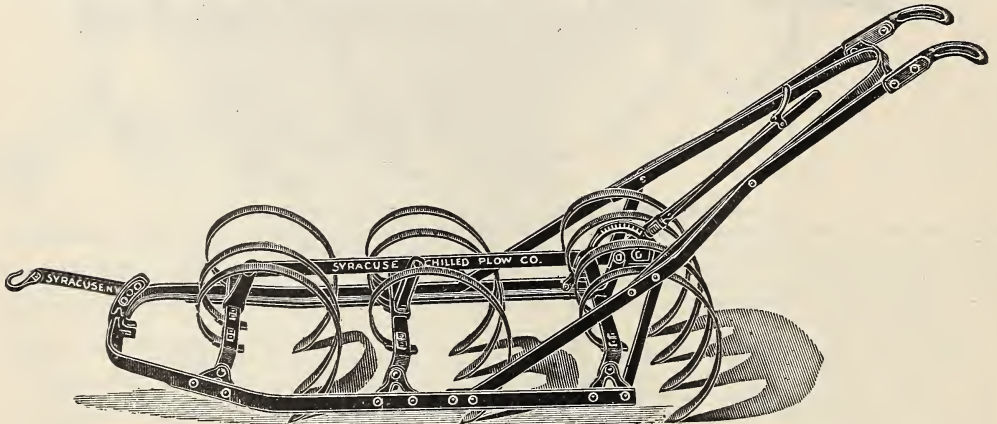
John Deere Universal Steel Lever Harrow

TEETH PERPENDICULAR FOR PULVERIZING

In the Deere Universal Steel Lever Harrow we offer a tool which is entitled to great favor. The Tooth Bars are made of U-bar steel, which insures strength without useless weight. At the same time the sections are heavy enough to give to the teeth the proper amount of penetration in any condition of soil. The teeth are fastened to the bars by our patent tooth fastener, which holds the tooth firmly in position, and yet, by slightly loosening the nut, permits the tooth to be removed readily for replacing with new one or to turn the tooth to present a new corner to the work when it becomes worn. Hinge castings are attached firmly to each end of the tooth bars, and are riveted on the outside of the side bars. The tooth bars turn freely, and can be easily adjusted so the teeth will work at any desired angle. Harrow is also provided with a spring trip, which preserves the teeth when using this harrow in stony or rooty ground.

25 Tooth Universal Drag Harrow; weight, 81 lbs.	Price	\$11.50
30 Tooth Universal Drag Harrow; weight, 95 lbs.	Price	12.75
50 Tooth Universal Drag Harrow; weight 182 lbs.	Price	25.75
60 Tooth Universal Harrow; weight, 211 lbs.	Price	28.75

We can also furnish larger size harrows.



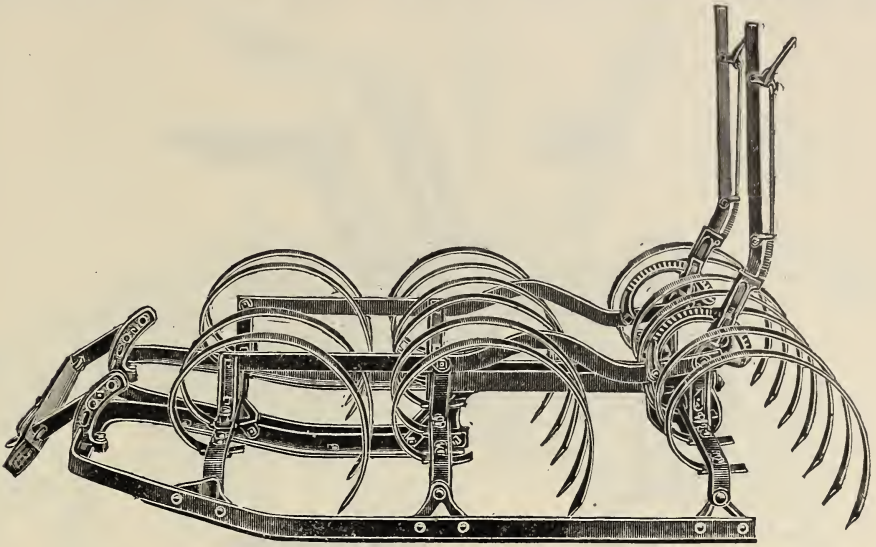
Syracuse Single Section Low Down Spring Tooth Harrow

The Syracuse frame and tooth bars are made of channel and angle bar steel of from 40 to 50 points carbon. The frame thus has great strength without disturbing the elasticity of the bars. A distinctive feature of the Syracuse construction is that the frame between the section has a small opening in front, which grows wide towards the rear. All loading or choking at this point is thus absolutely prevented. The runners have heavy steel protective shoes, and they provide twice the wear of the ordinary shoe on most other harrows. All Syracuse spring teeth are made of a special high-carbon spring steel, and without bolt holes.

10 Tooth Syracuse Single Section L. D. Spring Tooth Harrow, cuts 3 ft., weights 165 lbs.	Price	\$24.00
9 Tooth Osborne Single Section L. D. Spring Tooth Harrow, cuts 2½ ft., weight 130 lbs.	Price	\$19.50

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SPRING TOOTH AND ONE-HORSE DISC HARROWS



Syracuse Spring Tooth Harrow

The Spring tooth harrow furnishes the best and only practical means of pulverizing sandy, gravelly or stony ground, where deep cultivation is required. The main advantage in the use of the spring tooth harrow, as compared with the disc or smoothing harrow, is that the spring tooth will penetrate to a greater depth than the other harrows and the lower strata of soil may be dug up, brought to the surface and mixed with the top soil.

The Syracuse frame and tooth bars are made of channel and angle bar steel of from 40 to 50 point carbon. The frame thus has great strength without disturbing the elasticity of the bars. The frames of some competing harrows are of 10 to 20 points carbon, which makes a soft steel, easily bent, and such bars when once sprung do not come back into shape.

The runners have heavy steel protective shoes $\frac{1}{4}$ -inch thick, and they provide twice the wear of the ordinary shoe used on most of harrows.

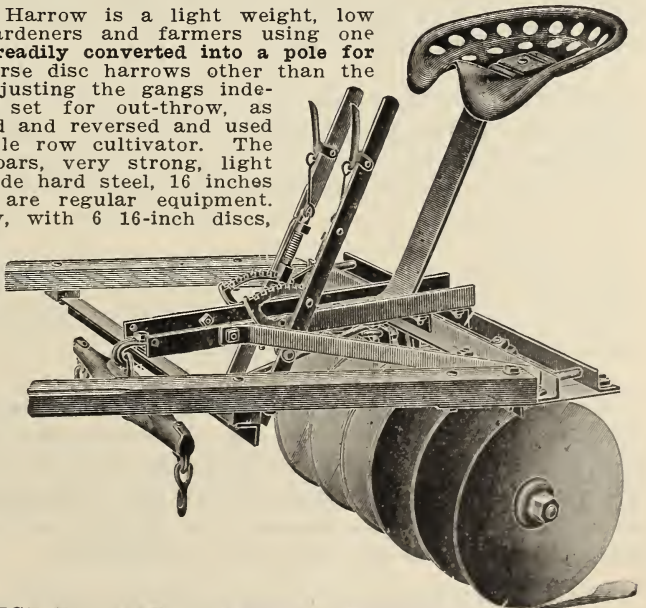
15-Tooth Syracuse 2 Section Spring Tooth Harrow; cuts 5½ ft.; weight, 240 lbs	-----\$32.25
17-Tooth Syracuse 2 Section Spring Tooth Harrow; cuts 6 ft.; weight 260 lbs.	-----34.75
15-Tooth Syracuse 2 Sec. Sp. Tooth Harrow, with wheels; cuts 5½ ft.; wt. 318 lbs.	42.00
17-Tooth Syracuse 2 Sec. Sp. Tooth Harrow, with wheels; cuts 6 ft.; wt., 340 lbs.	45.00

Riding Attachment for Wheel Harrow Extra

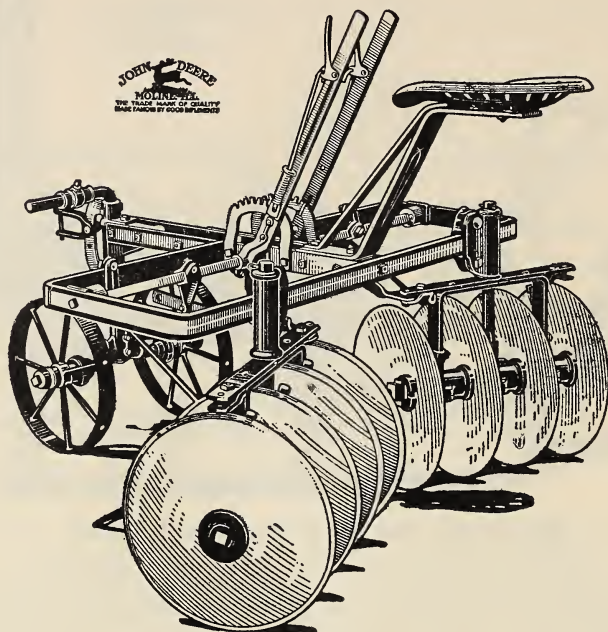
Imperial One-Horse Disc Harrow

The Imperial One-Horse Disc Harrow is a light weight, low priced implement for market gardeners and farmers using one or two horses. **The shafts are readily converted into a pole for two horses.** Few, if any, one-horse disc harrows other than the Imperial have two levers for adjusting the gangs independently. The gangs can be set for out-throw, as shown in illustration, or extended and reversed and used as an inthrow harrow or straddle row cultivator. The frame is made of steel angle bars, very strong, light and rigid. Discs are of first grade hard steel, 16 inches in diameter. Cleaning scrapers are regular equipment. Imperial One-Horse Disc Harrow, with 6 16-inch discs, weight 210 lbs. -----\$33.50

See the New Multitool (page 88). This tool will cut your costs of weeding and mulching in the vineyards and gardens.



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Deere-Model "A" Disc Harrow

For the very best cultivation of orchards, vineyards and hop beds, the Model "A" is particularly fitted and meets all requirements. The disc gangs are reversible for either in or out throw, also adjustable in width from the center out, enabling the harrow to straddle rows or extend under the branches of trees. Discs can be extended out past the frame, doing away with the possibility of the frame scratching the trees when doing close cultivating in orchard work.

In vineyards this harrow can be adjusted to work as close to the vines as desired, working the ground thoroughly two feet or three feet from the row toward the center, and being reversible, you can throw the dirt either toward or away from the row, getting the weeds and stirring all the ground.

The frame is made of one solid piece of the best of steel. Disc blades are made of special high quality steel, carefully polished and ground to a sharp cutting edge and beveled back $1\frac{1}{2}$ inches on the counter side. The bearings are made of hard maple, soaked in oil, giving a smoother and longer wearing bearing than a metal bearing, also inexpensive when it is necessary to have one or more replaced.

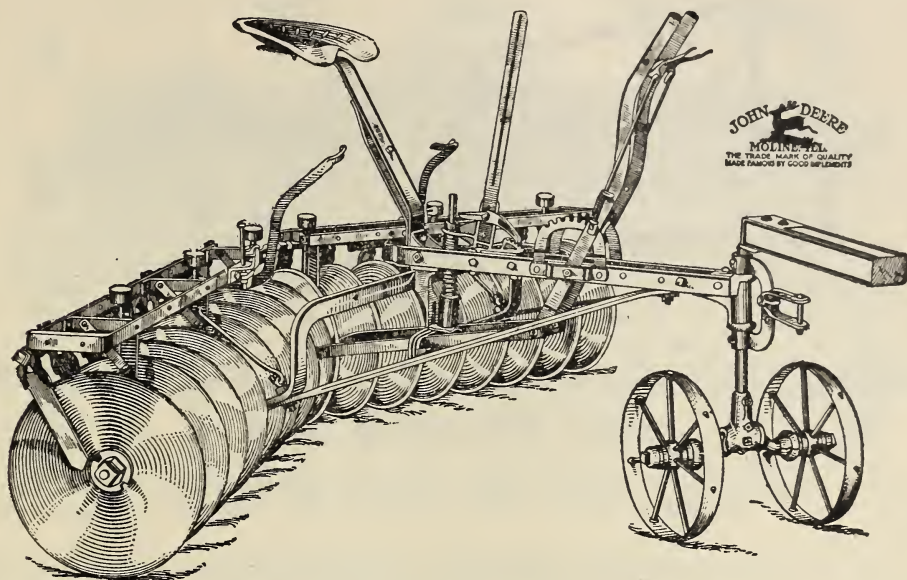
This harrow is stocked in one size only:

Model "A" 8—16-inch Disc Harrow, cuts 4 feet, weight, 366 lbs. -----\$45.25

For, Foretruck in place of pole, add \$10.00.

We also have the John Deere Universal disc harrow, which is also reversible and adjustable, and is built in the 3 foot size, with combination pole and shafts, which makes it quite adaptable for the very small ranch. The frame is built higher than on the Model "A," and is not adjustable to so wide a throw. It has the same grade material throughout, and as on all John Deere disc harrows, it is equipped with hard maple, oil soaked bearings. It is stocked in 3 foot sizes only, and in 16-inch disc.

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ARE ADVANCING**



JOHN DEERE MODEL B DISC HARROW

The John Deere Model "B" is not only superior in general construction to other discs, but there is also one most important difference in principle that places this machine strictly in a class by itself—its flexibility.

It is a high grade Spring Pressure, Flexible Harrow. A third lever with powerful spring is provided by means of which the driver can easily lower or raise the gangs at the center so as to either cut out dead furrows or to cultivate over ridges or back furrow without burying the harrow in the center.

Each gang of the Model "B" works independently, so that only the part passing over an obstruction is raised out of the ground. With a rigid harrow, the entire machine is lifted out and considerable ground left unworked. In other words, each gang of the Model "B" is controlled by a convenient lever so that the operator can readily regulate it to secure the desired penetration the full width of the harrow.

The Model "B" is a well-built harrow. The main frame is made in one piece from high-carbon steel. The gangs pivot directly from the ends without the addition of any links or extra couplings whatever. The frame is extra well braced by means of heavy bars laid edgewise. The braces also reinforce the bent ends of the main frame as they extend under and are bolted to them, securing greater strength and stiffness where it is most needed. Greater clearance for trash is provided than on any other harrow. The driver's seat is also well up out of the dust and dirt. The disc blades are the hard-working part of any harrow. Either plain blades or cut-away discs can be furnished for the Model "B." They are of the highest quality steel, thoroughly polished on cutting side and ground to a sharp cutting edge. Bearings are the well-known John Deere hard maple oil-soaked bearings, easier and cheaper to replace and also more durable than metal bearings.

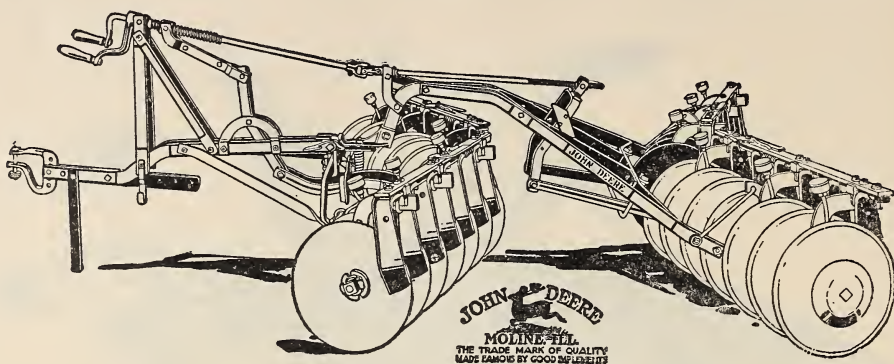
Hard-oil cups are conveniently located at top of frame out of the dust and dirt.

The scrapers are of an unusual type. They are independently removable, adjustable and replaceable. There are no rivets, set-screws or other objectionable features on them. The scrapers can be locked either at the center or edge of the discs,, keeping them absolutely clean, or, if not needed, locked off entirely, reducing draft. High-grade spring steel gives them ample stiffness and sufficient flexibility to do their work in the most efficient manner without breaking or bending out of shape.

- | | |
|--|-----------------|
| 8—16 Model B Disc Harrow; cuts 4 feet; 2 horse hitch; weight 367 lbs. | Price --\$50.00 |
| 10—16 Model B Disc Harrow; cuts 5 feet; 2 horse hitch; weight 418 lbs. | Price -- 53.75 |
| 12—16 Model B Disc Harrow; cuts 6 feet; 3 horse hitch; weight 463 lbs. | Price -- 59.50 |
| 8—18 Model B Disc Harrow; cuts 4 feet; 2 horse hitch; weight 390 lbs. | Price -- 53.50 |
| 10—18 Model B Disc Harrow; cuts 5 feet; 2 horse hitch; weight 418 lbs. | Price -- 58.50 |
| 12—18 Model B Disc Harrow; cuts 6 feet; 3 horse hitch; weight 493 lbs. | Price -- 66.00 |

For Foretruck in place of pole, add \$10.00.

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ARE ADVANCING



JOHN DEERE MODEL "L" TRACTOR DISC HARROW WITH YIELDING LOCK

The John Deere Model "L" Disc Harrow is a good investment for any farmer who owns a tractor and who desires a harrow that can be controlled entirely by the man on the tractor.

Two cranks easily reached by the operator of the tractor permit the independent angling of front or rear sections. Either section can be straightened quickly when in danger of stalling the tractor in heavy pulling, or the gangs can be set in any position from a straight line to extreme working angle **without stopping or backing**. When you go to see this harrow, be sure to try out these cranks and find out for yourself how easily they are operated.

FLEXIBLE—DOES A COMPLETE JOB OF DISKING

The John Deere Model "L" is not a rigid, one-piece frame, tractor disc harrow. It penetrates and pulverizes its entire width even when going over depressions or obstructions. It is a flexible harrow. Each section, and, in fact, each gang works independently, diskings all the ground without twisting or binding the frame. Three things make it flexible—its automatic, yielding lock coupling, universal joint on control rod, and the pivoted yoke.

PATENTED AUTOMATIC YIELDING LOCK COUPLING COMPELS REAR DISCS TO PENETRATE PROPERLY

This device, which connects the front and rear sections, is an exclusive feature. It compels the rear discs to do their work properly—to cut the ridges left by the front discs instead of trailing in their furrows; and it also prevents the rear section from swinging when one side of the harrow encounters more resistance than the other. The rear section is locked when traveling straight ahead, but, when turning, a coil spring yields, unlocking the coupling. There is no dragging of the harrow when turning.

STONES AND STUMPS DO NOT RAISE ENTIRE HARROW OUT OF THE GROUND

The John Deere Model "L" is provided with a pivoted yoke on the front section. The drawbars pass through this yoke. This permits the inner end of either gang to rise above the other without raising the entire harrow from its work.

The Aligning Device is another feature you will appreciate. It insures good work because it permits adjusting the coupling so that the rear gangs will be locked in the correct position. By means of two eccentrics on the front frame, the coupling may be adjusted to keep the rear section in alignment—just moving the two eccentric levers causes the rear section to move from either side to its proper place behind the front section so that the rear discs will always cut out the ridges left by the front discs.

CAN BE USED WITH ANY STANDARD TRACTOR

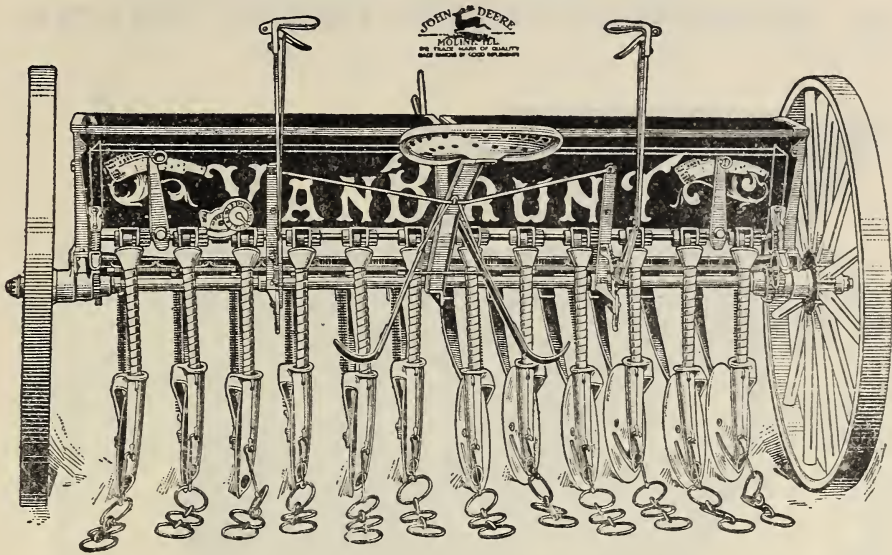
The hitch is adjustable to suit the height of any standard tractor drawbar. A forged steel clevis attached to the tractor hitch gives a range of vertical adjustment from eleven to nineteen inches. A leg on the front end of the hitch indicates the proper height of the harrow frame to secure correct line of draft for proper penetration with minimum load. The length of the hitch also can be changed to place the operating cranks in the desired relation to the tractor platform and seat. The low tractor hitch and low coupling between front and rear sections hold the discs down to their work, insuring good penetration.

6-Foot 18-in. Discs, Model "L" Tractor Disc Harrow, weight about 900 lbs. Price **\$139.00**

7-Foot 18-in. Discs, Model "L" Tractor Disc Harrow, weight about 1000 lbs. Price **151.00**

We can furnish above with 16-in. Discs at less prices.

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VAN BRUNT GRAIN DRILL

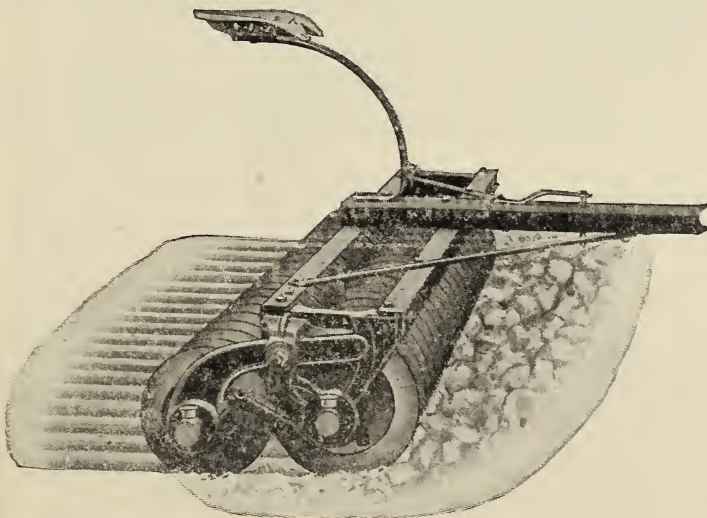
WHAT TO DEMAND IN A GRAIN DRILL

1. Adjustable force feeds that provide an even discharge, without bunching, of any and all kinds of seed into each seed furrow.
2. Furrow openers that make a proper seed bed, furrows of uniform depth, and deposit every seed on the bottom; that will work in any kind of soil that can be seeded, mud, gumbo, cornstalks or trash.
3. Light draft, light weight without the sacrifice of strength; proper proportions to provide against excessive strain.
4. Long life with small repair bill.

By these standards we ask you to judge the Van Brunt.

12—Disc Van Brunt Single Disc Drill with 6 inch space; weight	\$147.25
16—Disc Van Brunt Single Disc Drill with 6 inch space; weight	185.00

BRILLION CULTI-PACKER

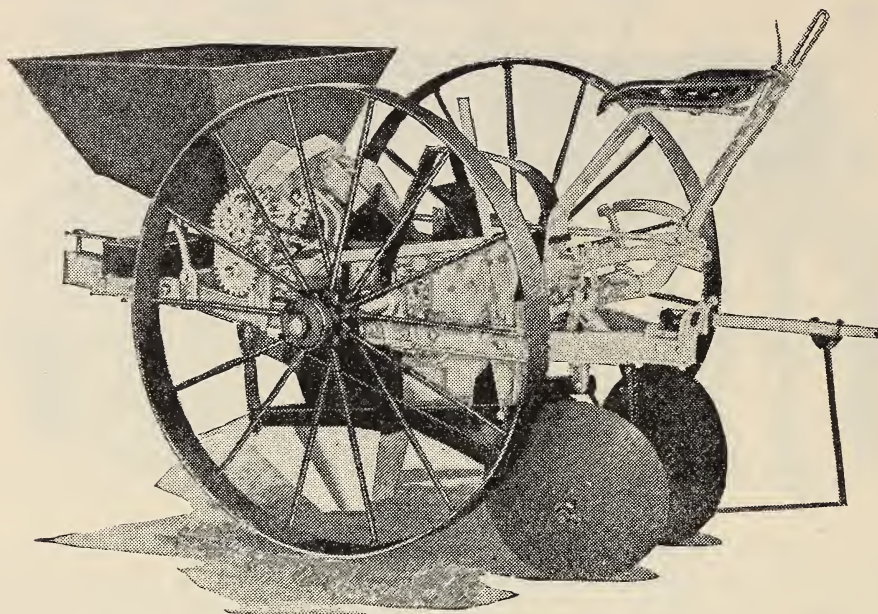


Brillion Double Gang Culti-Packer is a combination pulverizer, roller, packer, and clod crusher. In one operation it will make all these steps at the same time, preparing an ideal seed bed. In many localities this is the only tool of its kind used before and after seeding. It should be used on growing grain any time before the grain starts to joint, working the soil surface, and making a surface mulch that will remain until the crop is matured. It is also very profitable to roll meadows in the spring, firmly packing the loose dirt around the roots. Anyone using this tool finds it a profitable investment. The rear gang can be easily removed if a single roller is at any time desired.

Brillion Culti-Packer, 6 foot; rolls 5 feet, weight 762 lbs. Price	\$ 82.75
Brillion Culti-Packer, 8 foot; rolls 7 feet 4 inches, weight 1030 lbs. Price	109.50
Brillion Culti-Packer, 9 foot, rolls 8 feet, weight 1120 lbs. Price	118.25

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NO. 400—HOOVER VISIBLE POTATO PLANTER



Main Frame—Main frame is made of channel steel, in the form of a yoke, with both front and rear ends bolted solidly together, to which is bolted the main axle bearings and other parts of the planter.

Drive Wheels—Drive wheels are 40 inches in diameter with 4-inch concave tires and have a tread of 35 inches. The wide, concave tires prevent the wheels from sinking in soft ground or slipping on hillsides. Both wheels are provided with ratchets for driving the main axle, which prevents side draft or extra strain on either wheel.

Roller Bearings—Main axle revolves in roller bearing boxes, bolted solid to the main frame. The intermediate shaft also is provided with roller bearings and, as all the power for driving the planting mechanism passes through these bearings, it assures light draft.

Hopper—Potato hopper is placed at the front end of the planter, and is provided with an agitator, which prevents the potatoes bridging. Hopper is made of sheet steel with reinforced top, making it rigid and durable. The hopper holds about two and one-half bushels, and is low down for easy handling of seed.

Positive Feed Wheel—A feed wheel is placed in the rear of the potato hopper for proper handling of the seed to the picking chamber. This wheel elevates the potatoes to the picking chamber. The speed of this wheel is under the control of the operator, so that the right amount of seed is in the picking chamber, thus preventing the flooding of the picking chamber.

Picking Chamber—The picking chamber bolts solid to the main frame and extends below the axle and picker arms, and is provided with concaves to properly hold the seed for the pickers. Adjusting springs are provided to give these the right pressure on the seed to get the best results.

Accuracy—Three things are very important to the accuracy of a potato planter: First, the right amount of potatoes in the picking chamber. Second, concave spring adjustment, right for the size of the seed. Third, picker points right. All of these features are embraced in the "Hoover," as the whole planting operation is in direct view of the operator, thus permitting him to observe at once any adjustment necessary to the concave springs or pickers and which concave or picker that needs the adjusting.

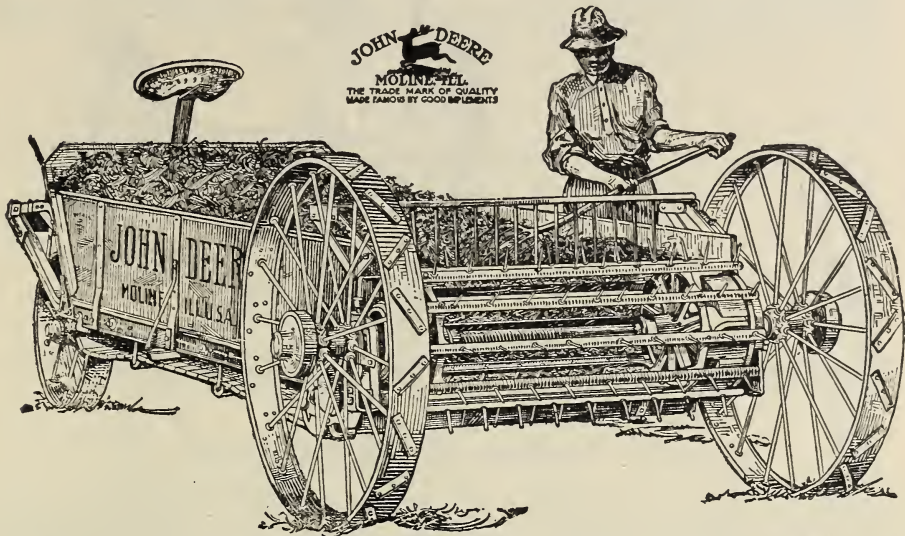
Spacing arrangement for changing the dropping distance is very simple. It is not necessary to dismantle the machine or remove drive wheel. Spacing is provided as follows: 9, 11, 13, 14½, 16, 17½, 19½, 22 and 24 inches. Any two are furnished regularly.

No. 400—Hoover Visible Potato Planter, weight 670 lbs. One row. Price -----\$117.00

No. 405C—Hoover Visible Potato Planter, weight 1300 lbs. Two row, 36 38, 40 in. 221.75

JOHN DEERE LOW DOWN SPREADER

With the Beater on the Axle



In designing the John Deere Spreader the inventor worked on two ideals. First: To build it low down, making it easy to load and at the same time making high traction wheels. Second: To reduce the number of parts formerly used in the construction of manure spreaders. As they studied their plans they found that one change would give them the desired results, namely—BUILD THE BEATER ON THE AXLE. This allowed them to lower the entire frame of the spreader, at the same time doing away with over one hundred and fifty working parts. There are no adjustments on the John Deere Spreader; no chains of clutches to give trouble.

All these changes from the old style of spreader construction, in addition to making it more adaptable for its work, tends to lengthen the life of the spreader and reduce the cost of upkeep.

Space is too limited to enumerate all the good features of this machine in this catalog. But we wish to mention twelve of the advantages:

1. Easy to load from the front to the rear—only thirty-six inches to top of box.
2. High Drive Wheels lighten the draft and furnish extra traction.
3. Simple beater drive—gears run in oil in dust-proof case.
4. No clutches—no chains—few adjustments.
5. Only about half the parts necessary on the ordinary spreader.
6. Main working parts mounted on axle—true alignment maintained—no binding, heavy draft or breakage.
7. Patented apron drive prevents racing of apron under all conditions—does not act as a brake.
9. Easy to understand and operate—only two levers.
10. Turns in its own length.
11. Tractor Hitch permits of operating spreader from tractor seat.
12. With straw-spreading attachment, it spreads straw perfectly—a two-in-one machine that one man can operate.

John Deere Manure Spreader, capacity 50 bushels, weight 1825. Kindly ask for descriptive circular. Price \$205.50 for size B.

IT PAYS TO PRESERVE MANURE

Manure has a commercial value based upon the amount of nitrogen, phosphorous and potash it contains. It has an auxiliary value in the organic substance which equals the plant food elements. According to our best authorities, the value of manure in normal times is as follows:

Cattle -----	\$2.02 per ton	Horse -----	2.21 per ton
Hog -----	3.29 per ton	Chicken -----	7.07 per ton
Sheep -----	3.30 per ton	Liquid -----	7.00 per ton

The above do not include the value of the organic substance. The United States Department of Agriculture in Farmers' Bulletin No. 21 estimates that, if the manure from livestock is preserved, its value each year is as follows:

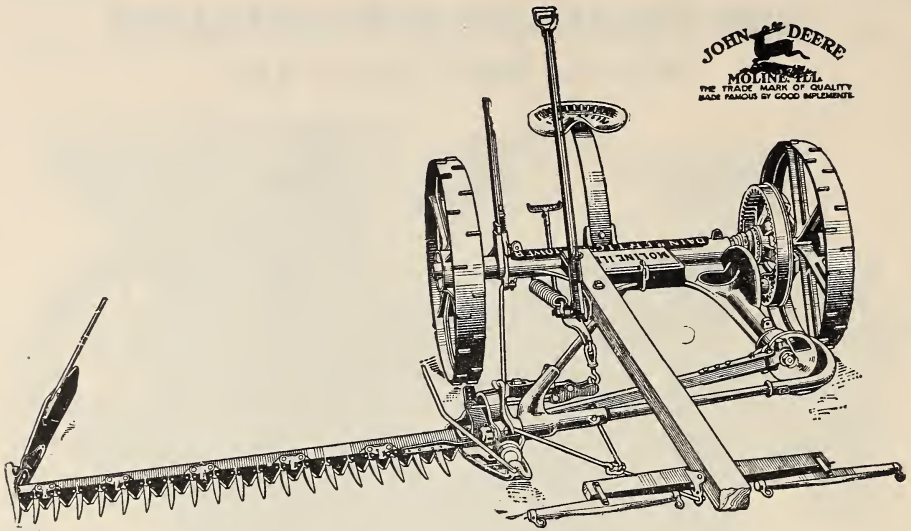
Horse Manure -----	\$27.00	Hog Manure -----	12.00
Cattle Manure -----	19.00	Sheep -----	2.00

NOTE—At the present price of fertilizer, the value is much greater.

The ideal way to preserve manure in order to prevent waste is to spread while in a fresh state directly on the land. When that is done, there is no loss from leaching or evaporation, and very little from washing.

When conditions prevent the farmer from hauling it direct to the fields, he should use care to prevent losses. Manure wastes in two ways—leaching and evaporation.

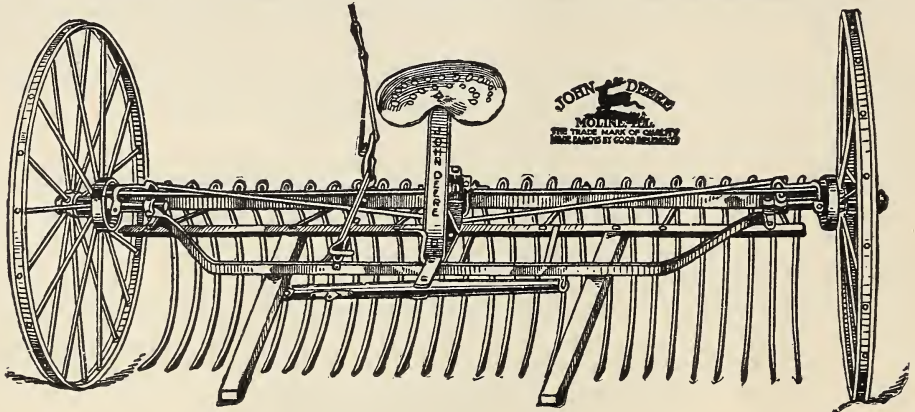
If carelessly left in the yard or in piles unprotected, a large per cent is lost by leaching and washing away. That liquid is just as precious as the golden grain in the bin, and, if it is lost, the land is deprived of its just portion of food.



JOHN DEERE DAIN MOWER

Main frame one solid, heavily ribbed casting; bearings all bored at one time, insuring perfect alignment. Large adjustable lifting spring carries weight of bar on wheels; no neck weight, and traction is increased. 21 point malleable clutch engages instantly, giving sure, positive drive and least possible friction. Simple arrangement of gears lessens friction, lightens draft, which means maximum power with minimum wear. Tilting rod is adjustable so cutter bar can be set for any kind of cutting. Heavy drag bar protects pitman and is easily adjusted for lining up cutter bar with pitman. Pitman straps are steel forgings. Sickles extra large, strong and durable. Bevel pinion placed with large end to rear, preventing end thrust of pitman shaft. A Dain Mower requires few repairs.

4½ ft. John Deere Vertical Lift Mower, weight 744 lbs. Price \$97.00.



JOHN DEERE SELF-DUMP RAKE

Heavy angle steel frame, well braced. Notice front frame angle extends to extreme end of frame; wheels have malleable hubs, heavy reinforced renewable sleeve, wide channel tire protecting the 20 7/16 round staggered spokes; wheels are interchangeable to secure new ratchet wearing surface. The rake is made almost entirely of steel and malleable iron, the heavy wheel ratchets being Grey iron. ½-inch steel truss rod reinforces the rake head; impossible to sag in center. 1¼-inch axles, slightly bent to give wheels necessary pitch. Wheels can never tip in at top. ¾-inch dump rods; high grade steel, interchangeable and reversible, giving them four times ordinary wear. Hand lever regulates position of teeth, and locks rake head for transportation by simply operating lever latch. Regular tooth holders accommodate minimum or maximum number teeth for fine or coarse raking.

8 ft. John Deere Self Dump Rake, 20 teeth, weight, 405 lbs. Price \$47.50.

9 ft. John Deere Self Dump Rake, 24 teeth, weight, 440 lbs. Price, \$50.00

Send for our special bulletin on Better Hay and How to Make It.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

McCORMICK MOWERS AND RAKES



McCORMICK VERTICAL LIFT MOWER

Easy running and simple in operation. The bar of the McCormick vertical life mower is easily raised to a vertical position while machine is in motion and the mower is automatically thrown out of or in gear as bar is raised or lowered. Two horse, 4½ ft. mower, weight 725 lbs. Price, \$92.50.

Can furnish these mowers in five ft. and six ft. if desired.

McCORMICK RAKE

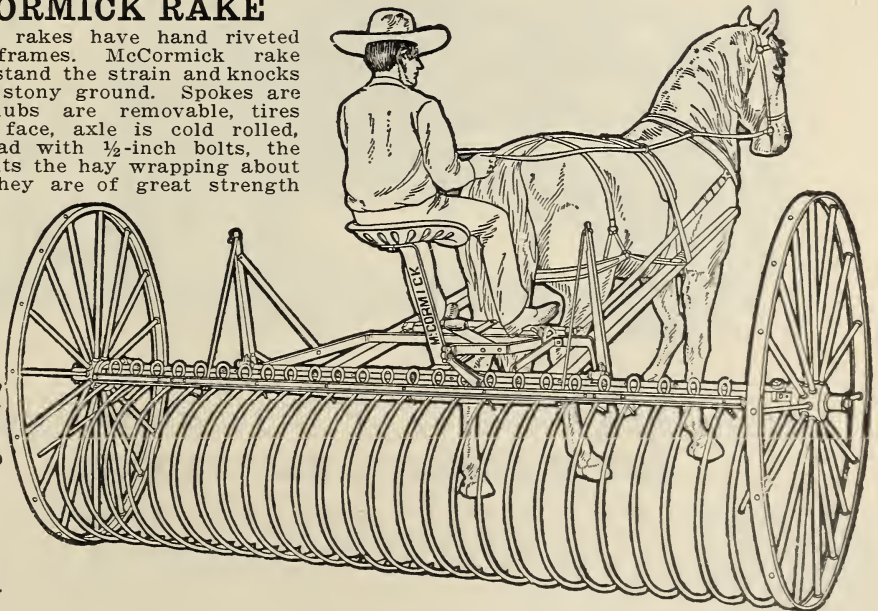
McCormick rakes have hand riveted hinges and frames. McCormick rake wheels will stand the strain and knocks of hills and stony ground. Spokes are staggered, hubs are removable, tires have 2-inch face, axle is cold rolled, bolted to head with ½-inch bolts, the flange prevents the hay wrapping about the hub. They are of great strength and stiffness and so carefully balanced that they are most easy to operate.

8-ft., 20
tooth, S. D.
Rake, wt.
400 lbs \$45.00

9-ft., 23-
tooth S. D.
Rake, wt.
450 lbs \$47.50

Can also
furnish 10-
ft. and 12-ft.
rakes.

-All McCor
mick rakes
have com-
bination pole
and shafts.



McCORMICK ALL-STEEL SELF DUMP RAKE

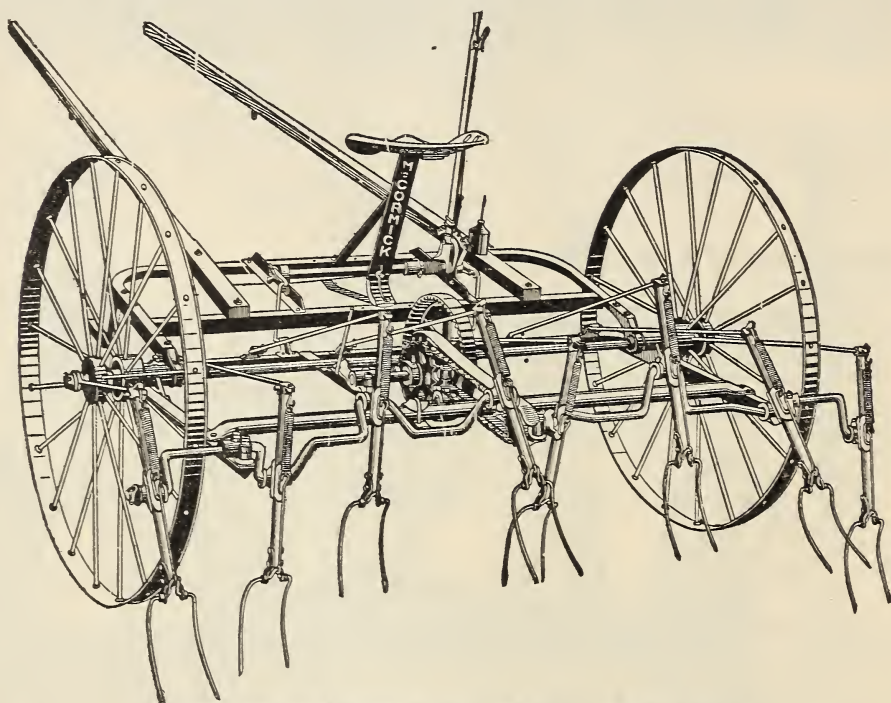
PRICES SUBJECT TO CHANGE WITHOUT NOTICE



ONE HORSE 3½ FOOT VERTICAL LIFT MOWERS

Suitable for use among stumps and on small farms. Easy running and simple in operation. Cutter bar is raised to a vertical position from the driver's seat while in operation, throwing machine out of gear, stopping movement of the knife and saving highly speeded machinery from a great deal of wear.

McCormick New Little Vertical One Horse Mower, weight 560 lbs. Price, -----\$85.50.



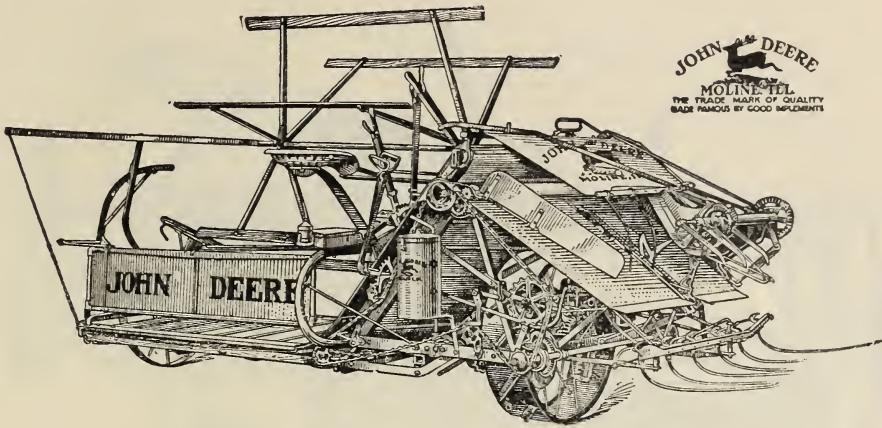
THE McCORMICK HAY TEDDER

Above illustration shows the New McCormick Hay Tedder. The main frame is of heavy angle steel, solidly riveted; cannot twist and sag. Wheels have channel tires, spokes widely staggered. Forks are of high grade spring steel and are provided with coil springs, which prevent breakage when striking an obstruction. The crank shaft is driven by means of a gear wheel mounted on the center of the axle, and hence the full driving power of both wheels is imparted to each fork. All tedders have combination pole and shafts.

6-Fork McCormick Steel Tedder, weight 525 lbs. Price -----\$72.75

8-Fork McCormick Steel Tedder, weight 565 lbs. Price -----\$1.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



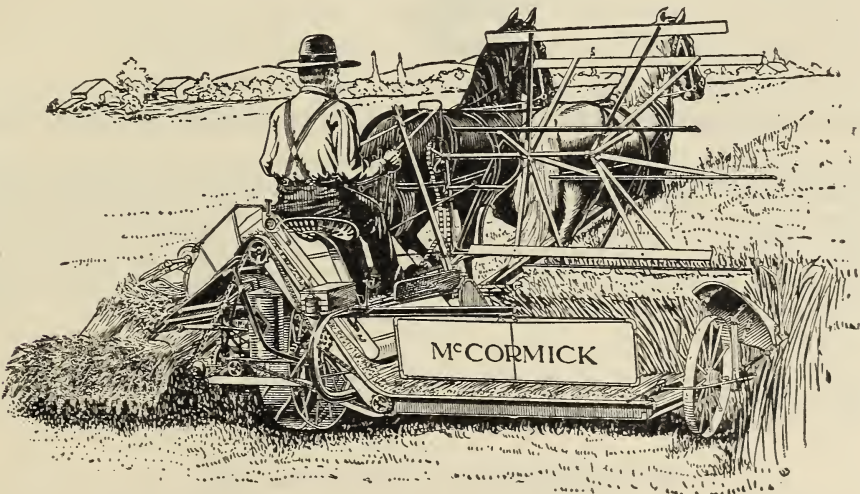
JOHN DEERE
MOLINE, ILL.
 THE TRADE MARK OF QUALITY
 MADE FAMOUS BY GOOD IMPLEMENTS

JOHN DEERE LIGHT DRAFT BINDER

A Few of the Features You Get In the John Deere Binder

- Main Frame**—Riveted, rigid and enduring.
- Platform**—All steel, rivited, with extra reinforcement.
- Binder Deck**—All steel, everlastingly good.
- All Wearing Parts**—Of Knotter Special Hardened and Finished.
- Outside Reel Support**—On all sizes except 5 foot.
- Heavy Canvas**—With concave slats to prevent catching straws.
- Roller Bearings**—With self-aligning bearing boxes.
- Three Packers** and three discharge arms.
- Large Drive and Grain Wheels**—With extra wide tires.

6-foot John Deere Binder, weight 1788 lbs., with stiff pole 3 H.H. -----	\$253.25
6-foot John Deere Binder with Tongue Truck, weight 1938 lbs., 4 H. Hitch -----	278.25
Transport Trucks, weight 88 lbs. Price -----	14.00



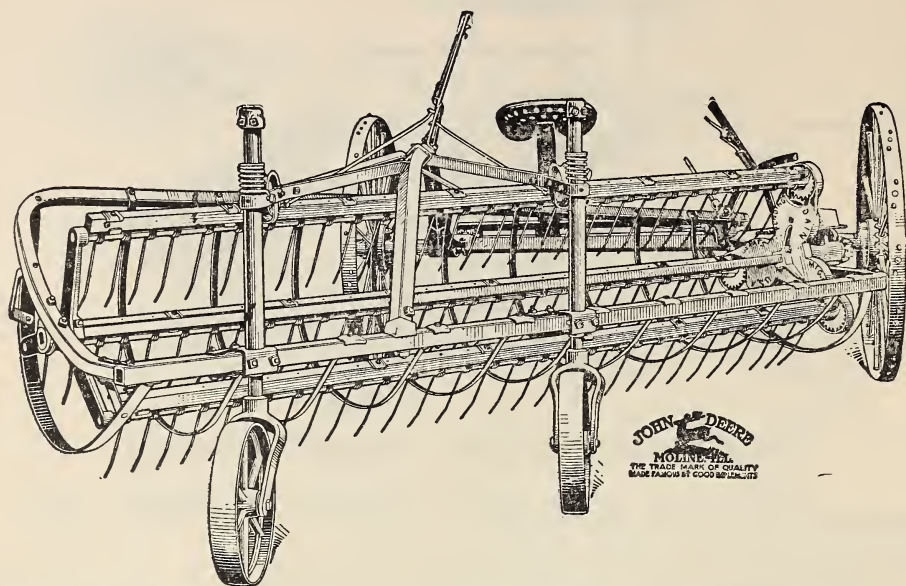
McCORMICK NEW L. H. HARVESTER AND BINDER

While illustration shows right-hand cut, we carry this machine in left-hand cut only.

The McCormick machines are known the world over for their durability and strength, as well as for their light draft.

6-foot McCormick New Left-Hand Harvester and Binder, weight 1700 lbs. Price -----	\$228.50
Tongue Truck, weight 265 lbs. -----	35.00
Transport Trucks, weight 120 lbs. -----	13.50

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



JOHN DEERE DAIN SYSTEM RAKE—LEFT HAND

Follow the mower with a Dain System Side Delivery Rake—you don't need to wait until practically all the meadow is cut, and besides, you get air-cured hay—hay that retains its natural color and richness. This is the hay that brings the best price on the market. The mower goes around the field turning to the right; therefore, the Dain System Side Delivery Rake has the following advantages over other rakes:

- a—It can follow the mower, thus working against the head of the hay.
- b—It places all the hay upon clean stubble out of the way of the mower.
- c—Turns a good square corner without bunching the hay undesirably.
- d—Air-cures the hay. It delivers two swaths of grass upside down in a loose continuous

windrow. Thus, air can pass through it freely, curing the hay evenly with no loss of coloring, and the hay is not sun-scorched. The slow, steady motion of the teeth rakes the hay without injury. Teeth can be adjusted to rake clean in either light or heavy hay. Ample clearance is provided for making large windrows that are straight and easily followed by the loader. Rake is furnished with one or two castor wheels, as desired. These help support the frame. Cushion springs on the castor wheel posts absorb the jar when working on rough ground, and these parts also provide adjustment for height of the reel. Main frame is made of square steel tubes, and a square tubular arch over the reel insures great strength for supporting the reel and at the same time makes the rake simple and easy to handle.

Each wheel helps to drive the working parts, except when turning. Then the wheel describing the greater arc furnishes the power. The teeth are rotated at sufficient speed all the time to keep the rake from clogging.

All Adjustments Can Be Made From Seat

This is accomplished by means of a convenient shifting lever. The teeth can be angled to accommodate heavy or light hay, and points of teeth can be raised or lowered to work over uneven meadow surfaces. Furthermore, the teeth can be lifted up and held nearly horizontal for transportation.

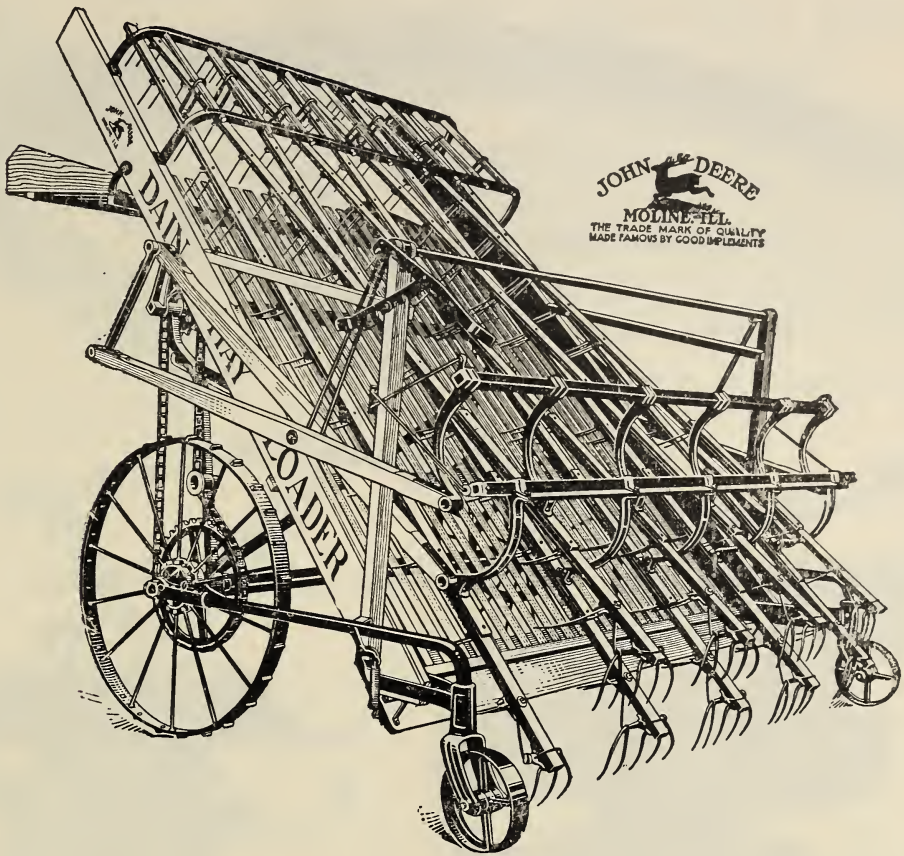
Rake is thrown in and out of gear by means of a convenient lever and is readily adjustable for raking beans.

Left main wheel can be set out to give more clearance in raking unusually heavy hay.

This Rake is one of the most profitable and necessary tools in the successful curing of hay in this climate. Send for our special circular.

John Deere Dain System Side Delivery Rake, weight 1000 lbs. 4 wheel -----\$127.50

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



JOHN DEERE DAIN HAY LOADER—The “One-Man” Loader

Puts hay so far forward on the wagon that only one man—the driver—is required. It is the most popular loader of the rake bar type because it handles the hay exactly right. Its rakes are operated at the proper speed to require the least power and yet rake clean. Strokes of the rakes overlap, practically raking the ground twice. Gathers hay from swath the full width of the machine, regardless of mower used, dividing the swath when necessary. Ground rakes quickly adjustable to any height desired so as not to gather the bottom trash. Instant change to windrow. The Elevator adjusts itself automatically to light and heavy hay. Adjustable throat opening and expansible deck prevent chocking. Converging side boards and elevating bars narrow the stream of hay at delivery point, preventing it from falling off the wagon, while the delivery action of the rake bars pushes hay toward front of wagon. The Dain does not pull or drag hay back off the load.

The Smooth Running Loader Mounted entirely on wheels. Rear wheels caster—there is no dragging around corners. Roller bearings are used on all main journals, and principal working parts are hammock-mounted. They swing back and forth freely. Wheels are directly under loader, securing a narrow tread. Loader can be operated close to fences and ditches and moved through ordinary gates.

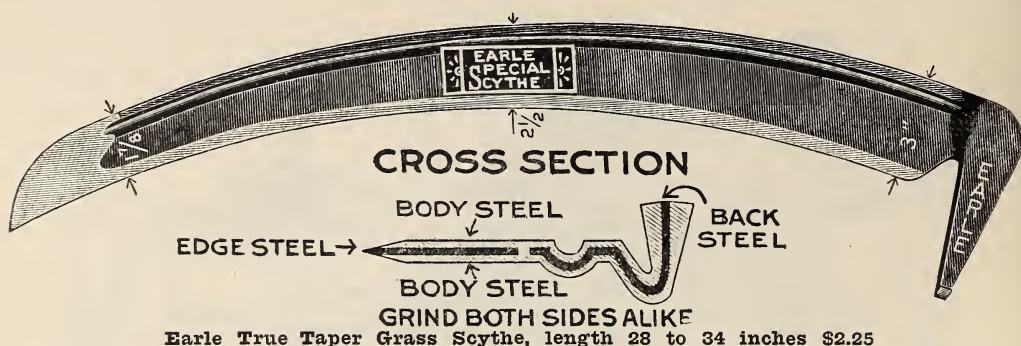
Built to Last—The main frame of the Dain Rake Bar Loader combines lightness, stiffness, strength and flexibility. Steel is used for the principal parts and the whole is braced and trussed effectually. Both wheels drive the working parts. The straight chain drive is simple and reliable. Working parts of loader are easily thrown in and out of gear.

Universal coupling enables driver to uncouple loader without getting off the wagon.

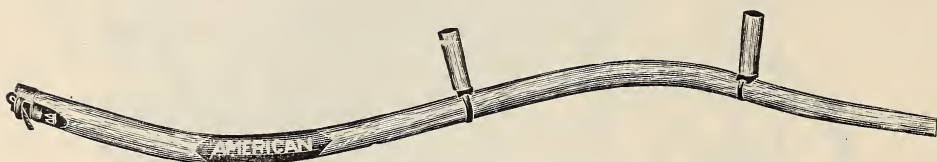
John Deere Dain Hay Loader, weight 1000 lbs. -----\$140.00

NOTE—We have one used 6-foot Loader in stock at bargain price.—Guaranteed the same as new one.

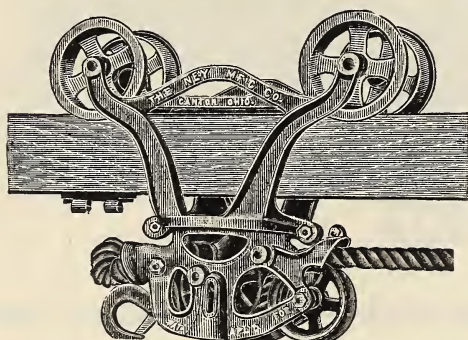
PRICES SUBJECT TO CHANGE WITHOUT NOTICE



Earle True Taper Grass Scythe, length 28 to 34 inches \$2.25



American Scythe Snath, Select Bent Ash Body, Malleable Iron Fitting 2.00



No. 90 Swivel Reversible Carrier

NO. 90 NEY SWIVEL REVERSIBLE CARRIER

FOR 4x4 WOOD TRACK

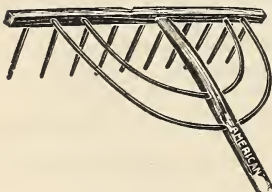
Furnished with Iron Sheaves Only

This carrier is constructed entirely of malleable iron; travelers and sheaves revolve on turned steel bushings, making it long-lived and easy running. Has large track traveler with wide tread, running easily and not roughing up track.

It is easily and quickly reversed from one end to the other in the barn.

Those desiring wood track carriers will find this one of the most simple and perfect carriers yet devised.

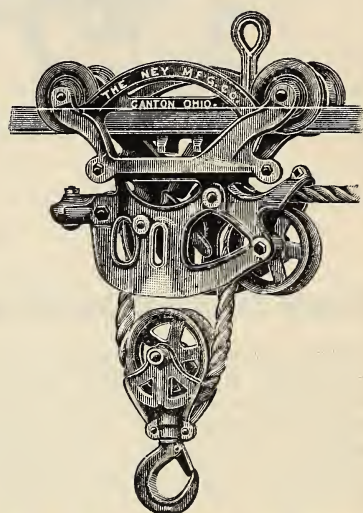
No. 90—Swivel Reversible Hay Carrier; wt., 33 lbs.
Price ----- \$10.00



Wood Hay Rake

No. 02. Wood Hay Rake, 10
teeth; length head 27 inches;
length handle 6 feet. Price

----- 60c



No. 85 Swivel Reversible Carrier

NO 85 NEY SWIVEL REVERSIBLE HAY CARRIER

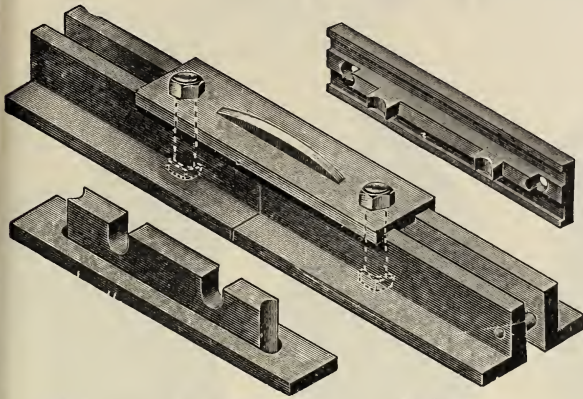
For Double Angle Steel Track

Constructed entirely of malleable iron. Travelers and sheaves revolve on turned steel bushings, making it long lived and easy running.

Cannot pass the bumper or trip block while in operation and is easily reversed from the floor.

Furnished with rope or cable sheaves as desired.

No. 85 Swivel Reversible Hay Carrier. wt., 24 lbs. Price \$10.00



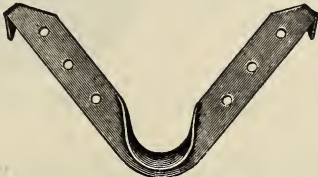
Ney's Double Angle Track and Splices

Ney's Double Angle Steel Track

This new style of angle steel track with splices is conceded by the users to be superior to all others now on the market. It is easily put together by the aid of a wrench only, and with the splice, as shown in cut, properly tightened up, the joint is made exceptionally strong and rigid. The track is riveted together in sections and can be put up, length after length, and also be added to at any time should it become necessary. Furnished in lengths of 6, 8 and 12 ft.

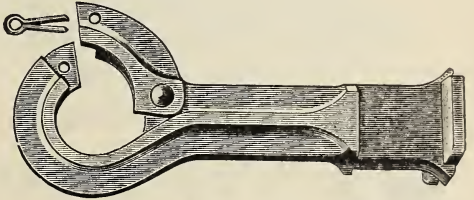
Ney's Double Angle Steel Track with splices, per foot, wt., $2\frac{1}{4}$ lbs. --29c

HAY CARRIER FIXTURES



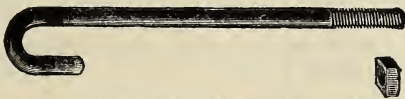
Rafter Bracket

Steel Crimped Bracket for track eyes and wood track hooks, each -----10c



Double Angle Track Eye

By using this eye, brackets may be put on, lined up, then eye hooked over. Track Eye, $5\frac{1}{2}$ in. long, each -----20c



Wood Track, Hanging Hook

16 in. long, Hanging Hooks, each ----20c

FLOOR HOOK

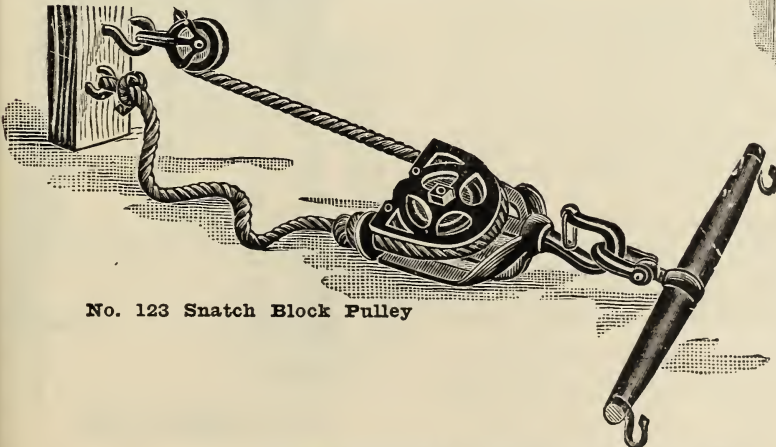
$\frac{3}{4}$ -inch wrought floor hooks. Price each 25c.

No. 123 Snatch Block Pulley

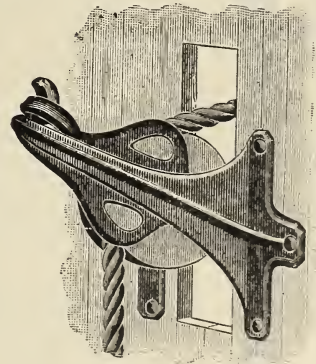
The Snatch Block Pulley is a pulley that every farmer should have if he has a Hay Fork and Hay Carrier. This device shortens the travel of the horse without reducing the elevating power.

No. 123—Snatch Block Pulley for Hay Carrier -----\$1.60

Singletree does not belong to Pulley



No. 123 Snatch Block Pulley



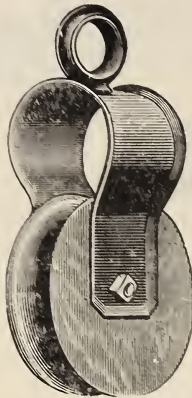
New Bracket Pulley Holder

Very Convenient for leading rope to a point outside of barn. All work of attaching can be done from the inside. Ney Bracket Pulley Holder, each -----\$1.25

HAY PULLEYS AND HAY FORKS



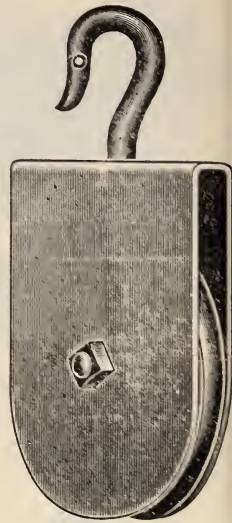
No. 495



No. 110



No. 137



No. 347

No. 347, Steel Frame Hay Block with 7 inch Iron Sheave on Roller Bearing, for Manila Rope, weight 8 lbs. -----\$1.60

No. 137, Malleable Frame Pulley with 6 inch Maple Sheave on Hollow Axle, for Manila Rope, weight 4½ lbs. -----65c

No. 110, Steel Frame Knot Passing Pulley with 6 inch Maple Sheave on Pipe Bushing, for Manila Rope, weight 3 lbs -----60c

No. 495, Malleable Frame Pulley with 6 inch Iron Sheave on Metallic Bushing, for Manila Rope, weight 5½ lbs. -----\$1.10

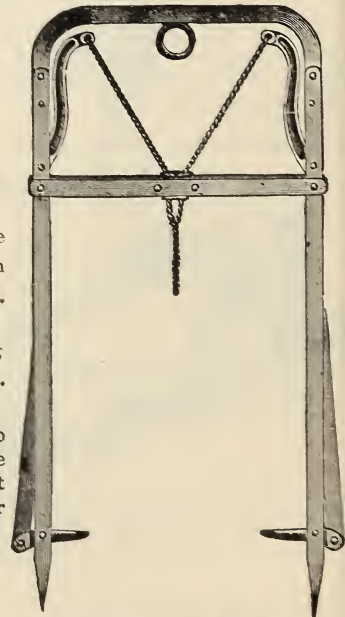


Single
Harpoon
Fork

No. 353—Double Harpoon Fork, is made of the very best steel. It is regular length tine, 25 inches. Weight 19 lbs. Price, \$3.25.

No. ---—Double Harpoon Fork, extra long tine, 32 inches. Weight 32 lbs. Price, 5.85.

Single Harpoon Hay Fork—This fork is too well known to need any description. Made of high grade material and will not get out of order. Single harpoon hay fork, regular length, weight 11 lbs. Price, \$5.25.



Double Harpoon Fork

HOCKING VALLEY CIDER MILLS

In the Hocking Valley Cider Mills are adopted the principles of the large hydraulic presses to a hand mill. The grinding device consists of a hard-wood cylinder, revolving rapidly with serrated steel knives running lengthwise, which break down the juice cells and make a pomage that yields under the press every particle of juice in the fruit. A quart of water will clean it after using, an important feature of these mills is the absence of metal of any kind to rust and impair the quality of the cider. Hocking Valley Bantam Cider Mill weight 120 lbs. -----\$29.00

The two tub Hocking Valley Cider Mills are made in the following sizes, all having greater capacity than corresponding sizes of other mills. The Hocking valley Junior, in capacity, almost equals the medium of other mills.

Junior Hocking Valley Cider Mill, with 10x10½-in. tubs, weight 175 lbs. Price -----\$41.50

Medium Hocking Valley Cider Mill, with 12x12½-in. tubs, weight 255 lbs. Price -----\$53.00

Senior Hocking Valley Cider Mill with 14x15½-in. tubs, weight 360 lbs. Price -----\$73.00

Pulley for medium or senior mills \$2.75.



HOCKING VALLEY JUNIOR CIDER MILL --.

ROOT CUTTERS

The feeding of roots to stock is being practiced more and more in this country. Like various other foods, roots are more valuable and convenient to feed when cut or sliced, and the "Rapid" Cutter and Slicer, shown here, is an excellent machine for this purpose, with large capacity. It is simple and not liable to get out of order.

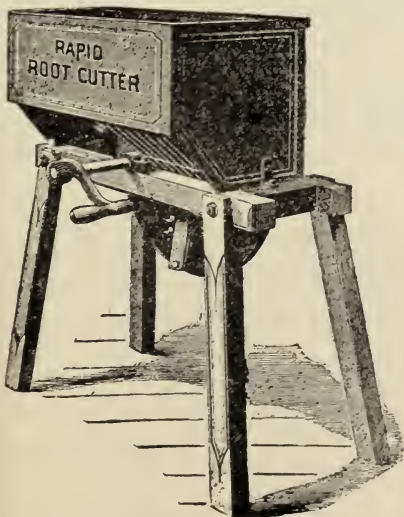


FIG 2

Description of Cutter—The three cutting knives on the fly-wheel follow closely after small projecting slicing or slitting knives, which cut at right angles to the edge of the cutting knives, thus reducing the material to a very nice condition for feeding. The hopper bottom is of slanting cast grating, which allows dirt, gravel or foreign matter to fall through and thus be kept separate from the cut feed.

Safety—The opposite side of the hopper is solid, and entirely covers up the fly-wheel and knives, so that children or others around the machine cannot come in contact with these parts.

For Hand or Power—The shaft is best cold rolled steel, with strong crank on one end and fitted for 4-inch face, 10-inch diameter pulley on the other. The frame is hardwood and strong, being bolted through at the legs with tie rods running clear through, capacity about 50 bushels per hour.

Fig. 2—Weight 190 lbs. Price -----\$35.00

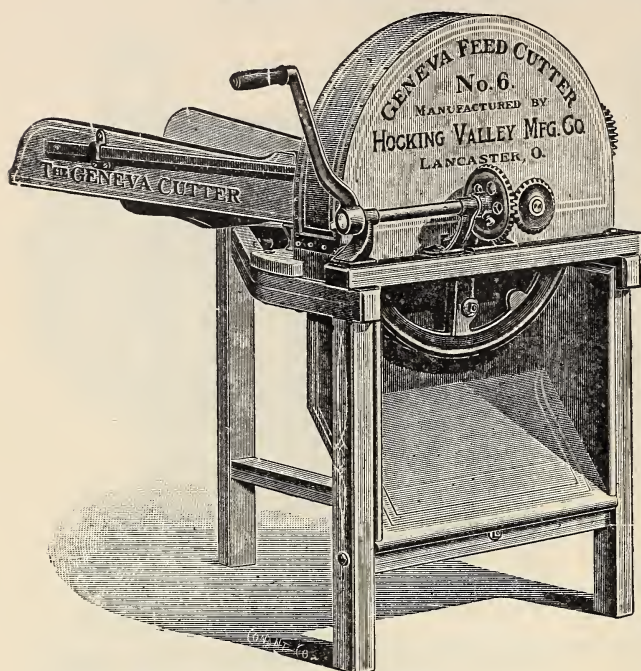
Fig. 3—Same as illustration, with exception of having perforated iron hopper instead of wooden hopper. Weight 215 lbs. Pulper and slicer --\$41.00

NO. 7 BANNER ROOT CUTTER The Poultryman's Friend

Vegetable Cutter—Will furnish green food during the winter for poultry and will cut potatoes, turnips, beets, carrots, apples, etc., in long shaving-like strings, readily eaten by your chickens.

No. 7—Banner Root Cutter, weight 50 lbs. \$9.50

FEED CUTTERS AND GRINDERS



No. 6 Geneva Feed Cutter

GENEVA POULTRY FEED CUTTER

The Geneva Feed Cutter is carried for the accommodation of those of our patrons who prefer a cutter with the knives on the balance wheel. The knives are straight, flat and of best quality steel, easily adjustable to the shear bar. Can be removed, ground and replaced with ease. Cuts $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 and $1\frac{1}{4}$ inch. It is a perfect hand cutter. The simple construction makes it very easy to operate by hand. Every part of the machine is strong and well built. Can be used by power if desired.

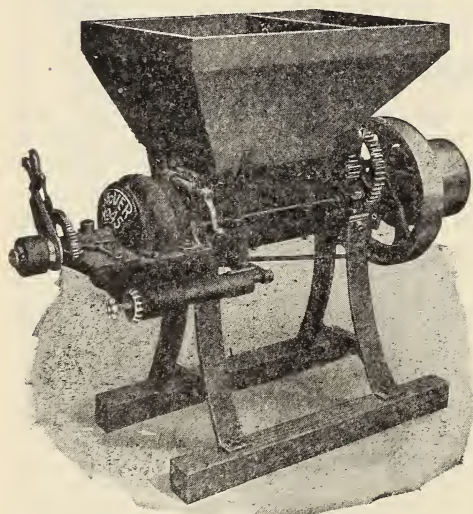
No. 6—Geneva Poultry Feed Cutter with two 9-in. knives, weight, 190 lbs. -----\$52.50

No. 8—Geneva Poultry Feed Cutter, with two 10-in. knives weight, 225 lbs. -----\$57.00

No. 10—Geneva Feed Cutter, with two knives, lever to throw out of gear and reverse rollers; wt., 260 lbs. --\$65.00
Can furnish power pulley.

We can supply larger Geneva Cutters.

NO. 4 AND 45 STOVER FEED GRINDING MILLS



No. 4 and 45 Stover Feed Grinding Mill

For Grinding Ear Corn, Shell Corn, and All Small Grains

These mills are lighter running and produce a larger capacity for the power applied than any other feed grinding mills of their style that are made.

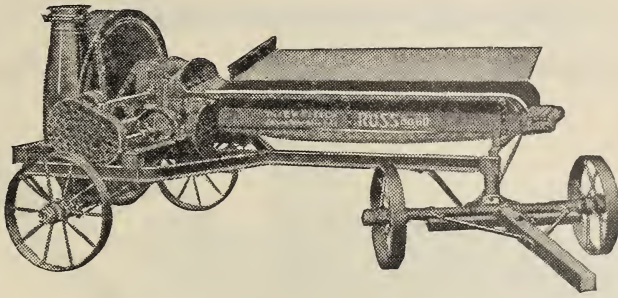
Grinding Burrs—These mills are equipped with our famous universal burrs, which make it possible to grind ear corn, shelled corn, oats or any small grain without changing the burrs.

Safety Lever—Shown on burr case end of mill enables the user to so set the grinding burrs that in starting and stopping the machine and also in case the hopper runs empty when the operator is away, the burrs will not drag together and do each other injury. In case a nail or other foreign substance gets into the burrs, the operator can quickly relieve the burrs by throwing the lever forward.

Safety Spring—Entire grinding load is carried upon coil spring in spring case as shown at side of mill in cut and from there upon ball bearings at the ends of the burr shaft. Should a nut or small piece of iron enter the burrs, this safety spring gives them an opportunity to get away from each other, thus lessening the liability of breakage. By turning the hand wheel at the end of the spring case, the desired grade of feed is obtained. **Prices on application.**

	No. 4	No. 45
Speed -----	400 to 600 R. P. M.	400 to 800 R. P. M.
Horse Power -----	2 to 6	10 to 20
Capacity -----	10 to 30 bu. per hr.	20 to 80 bu. per hr.
Diameter of Pulley -----	10 in.	12 in.
Face of Pulley -----	6 in.	8½ in.
Diameter of Burrs -----	8 in.	10 in.
Weight -----	403 pounds	550 pounds

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



ROSS ENSILAGE CUTTERS

We carry the Ross Cutters in Three Sizes, Numbers 30, 40 and 50

The No. 30 Ross Silo Filler is intended for the man who has his own power ranging from 5 to 7 Horse Gasoline. Due to the fact that it is especially designed for Gas Engine power, it is a very desirable individual outfit. Large capacity, low speed and light running. Capacity varies from 3 to 5 tons per hour, depending on length of cut. Speed, 650 r. p. m. Throat capacity 8 inches wide. Opens up $4\frac{1}{2}$ inches. Length of cut $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch.

EXCLUSIVE FEATURES—Self aligning and adjustable main shaft and roller shaft bearings, ball bearing end thrust to main shaft, four sided reversible steel cutting bar, swivel and tilting ring pipe connections, combination toothed and fluted feed rolls with comb bar attachment. Five-fan distribution lift blower.

Furnished with traveling feed table, stop, start and reverse lever, which controls feed rolls and traveling table, positive and quick-acting.

BLOWER CASING—The lower half is cast iron. The upper half is sheet steel hinged so as to open up to give access to cutting and blowing apparatus. The No. 30 will not handle Harvester Bundles without being subdivided. Furnished without truck if wanted.

GENERAL INFORMATION—Diameter of Blower, 34 inches. Drive Pulley, 8, 9 and 10 inches. Main Shaft, $1\frac{9}{16}$ inches. Length of Feed Table, $7\frac{1}{2}$ feet. Height of Feed Table from ground, $36\frac{1}{2}$ inches. Machine has 2 knives only.

NO. 40

The No. 40 machine is recommended for 8 to 10 Horse Power Gasoline Engine. Capacity varies from 6 to 8 tons per hour, depending on length of cut. Speed 650 to 750 r. p. m. Throat capacity 55sq. in., 11 in. wide. Opens up to 5 inches. Length of cut $\frac{1}{4}$, $\frac{1}{2}$, 1 and 2 inches. Especially designed for Gasoline Engine Power, but equally as well adapted for Steam Power.

The No. 40's main shaft is $1\frac{11}{16}$ inches. Feed table $8\frac{1}{2}$ feet long. Height of feed table from ground $36\frac{1}{2}$ inches. Diameter of blower 40 inches. Truck wheels—front 22 inch, rear 26 inch. Drive pulley standard 11-inch, choice of 9, 12 and 14-inch diameter for 7-inch belt, leather covered. Also furnished without truck. Can be used either with 2 or 4 knives.

NO. 50.

The No. 50 machine is recommended for 10 to 12 Horse Power Gasoline Engine. Capacity varies from 8 to 12 tons per hour, depending on length of cut. Speed 650 to 750 r. p. m. Throat capacity 72 sq. in., 13 inches wide. Opens up $5\frac{1}{2}$ inches. Length of cut $\frac{1}{4}$, $\frac{1}{2}$, 1 and 2 inches. Especially designed for Gasoline Engine power, but equally as well adapted for Steam Power.

The No. 50's main shaft is $1\frac{11}{16}$ inches. Feed table $8\frac{1}{2}$ feet long. Height of feed table from ground $36\frac{1}{2}$ inches. Diameter of blower 45 inches. Truck wheels—front 22 inch, rear 26 inch. Drive pulley standard 11-inch, choice 9, 12 and 14-inch diameter, for 7-inch belt, leather covered. Also furnished without truck. Can be used either with 2 or 4 knives.

	Weight Lbs.
No. 30 with Blower on Legs with 30 ft. pipe	800
No. 40 with Blower on Legs with 30 ft. pipe	1250
No. 50 with Blower on Legs with 30 ft. pipe	1450

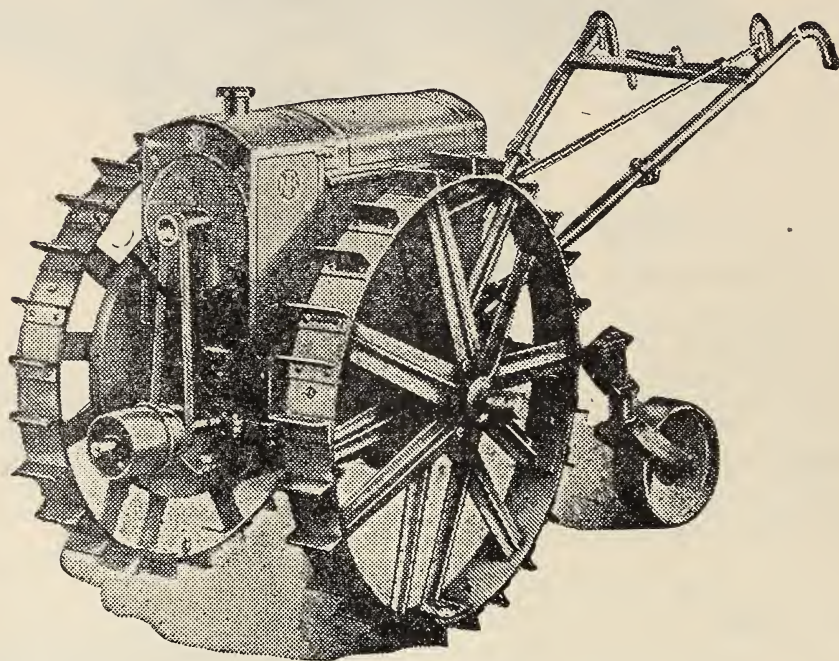
These Cutters can also be furnished mounted on Trucks.

WRITE FOR SPECIAL CATALOG AND PRICES ON DIFFERENT SIZES

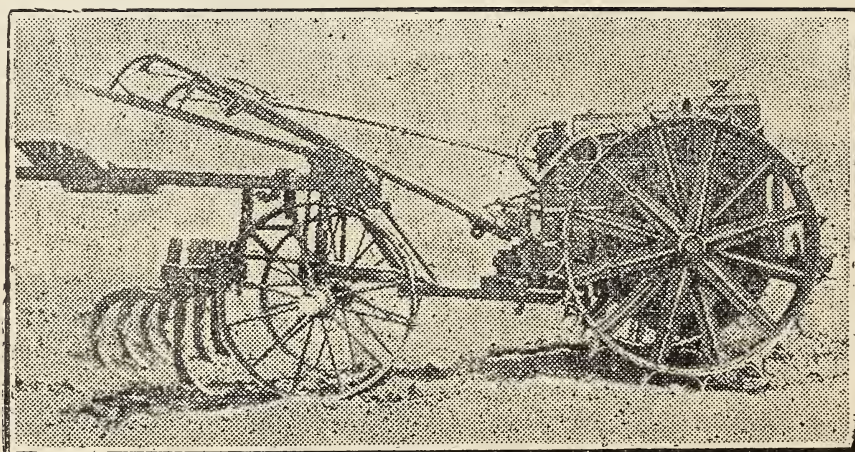
THE NEW BRITAIN TRACTOR

Two Cylinder

Six Horse Power

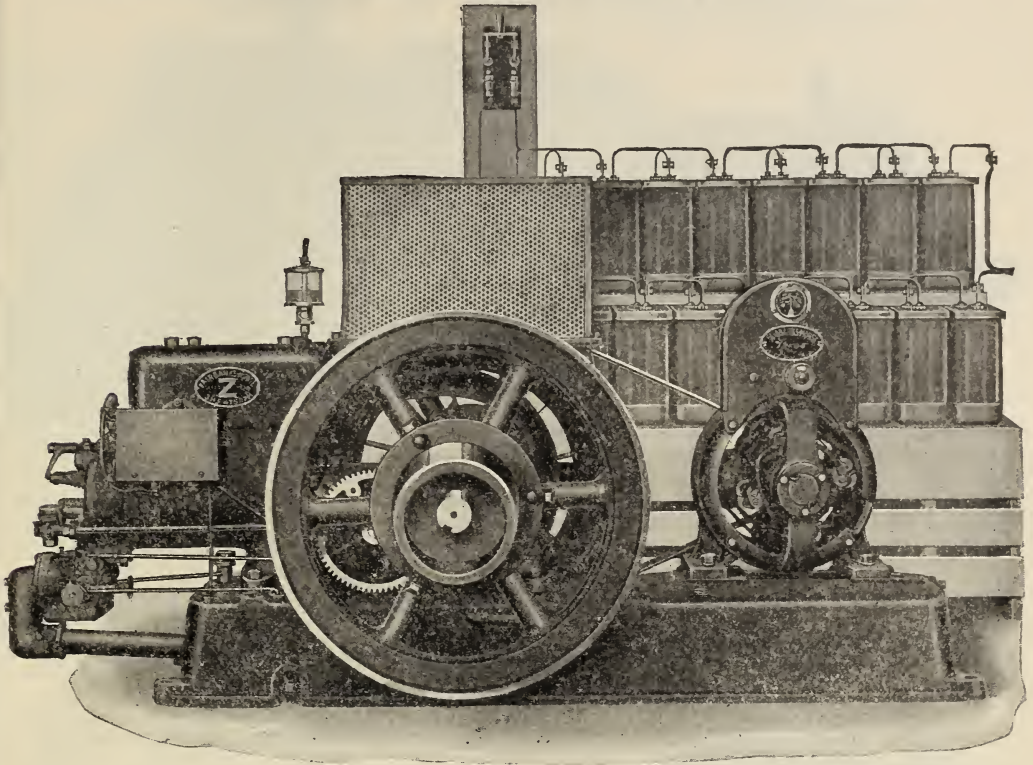


The N. B. Tractor takes place of one horse on the small farm or berry farm. The N. B. Tractor has a 2 Cylinder Motor, High Tension Magneto, and 32-inch Drive Wheels. The N. B. Tractor hauls a 9 to 10-inch plow or will haul a 4-ft. Disc Harrow or Acme Harrow. The N. B. Tractor comes with Power Pulley for Belt Work and will run a feed grinder, water pump, wood saw, or other work up to 6 H. P.. The N. B. Tractor will cultivate and is shown below attached to the No. 150 Planet Jr. Cultivator. Different steels, weeders, hoes, and furrowers can be attached to the Planet Jr. Cultivator.



PRICES AND CATALOG MAILED FREE ON YOUR REQUEST

THE FAIRBANKS-MORSE HOME LIGHT PLANT



THE DOUBLE DUTY UNIT

In designing this new plant, the special requirements of your farm service were always uppermost in mind. It was made simple—with fewest possible parts—all standardized and without complicated or delicate mechanism, so that it would be easy for you to start at the touch of a button, easy to run and easy to keep running. It was made complete to give light when and where you want it, conveniently and positively, or power to drive your other machines, either electrically or through a practical power pulley on the engine.

It was made **efficient**—the "Z" Engine running on kerosene as well as gasoline and driving a ball bearing dynamo. The belt drive allows the low speed engine to operate the dynamo at its best speed thus giving high efficiency and long life. The water cooling maintains the proper cylinder temperature for best combustion and the new condensing radiator retains the supply of water in the hopper, so that you seldom have to replenish it. The storage battery is especially designed to work effectively with this plant.

And finally, it was made dependable—through the combination of correct design, tested materials, clean-cut workmanship and desire to have it serve you honestly.

SPECIFICATIONS

The One and a Half Home Light Plant

H. P. Engine -----1½
 Speed of Engine -----500 R. P. M.
 Generator Capacity-----600 watts
 Generator Voltage -----30-32
 Generator Speed -----2000 R. P. M.

Battery Capacity 60 amp. hrs.
 (8-hour Basis) -----1800 watt hrs.

Engine Power Pulley-----4"x4"
 Total Shipping Weight -----985 lbs.
 Price ----- \$330.00

The Three Home Light Plant

H. P. Engine -----3
 Speed of Engine -----475 R. P. M.
 Generator Capacity-----1500 watts
 Generator Voltage -----30-32
 Generator Speed -----2000 R. P. M.

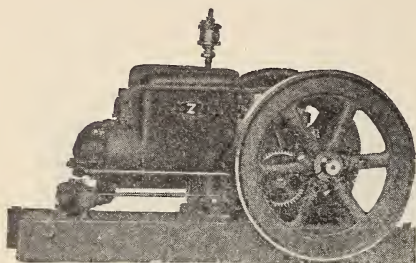
Battery Capacity 160 amp. hrs.
 (8-hour Basis) -----4800 watt hrs.

Engine Power Pulley -----10x6 in.
 Total Shipping Weight -----1800 lbs.
 Price ----- \$583.00

Send for bulletin covering the above plants.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FAIRBANKS-MORSE "Z" ENGINES



1½ H. P. "Z" Type Engine

The Fairbank Morse "Z" Type Engines are made in three sizes—1½, 3, and 6 H. P. These Engines are equipped with the Bosch High Tension Oscillating Magneto—the highest grade ignition system known. This is the same magneto that is used on the highest priced automobiles of today—both stock and racing cars. It gives to your "Z" engine an intense, efficient, penetrating, synchronized spark—reliable, steady, unaffected by atmosphere or continuous usage. It is of master design—scientific, self-contained, simple, rugged—built of best materials by expert workmen. It is the magneto you can depend upon—simply oil it and forget it.

You simply cannot get more engine value per dollar than you get when you buy these engines. They are built especially to use kerosene, distillate, coal oil, tops and other cheaper fuels as well as gasoline. Fix this in mind. The "Z" engines are not gasoline engines built over for kerosene—they are not gasoline engines with kerosene attachment. They are real kerosene engines that will use gasoline as well. Here's where you get your economy—these engines use kerosene so successfully that you get the same power from a gallon of kerosene as from a gallon of gasoline—and you save the difference in cost.

The "Z" Engines have other very important and distinct features such as—

Throttling governor assures constant, reliable power. It makes the engine run smoothly.

Suction fuel feed—no pump—simple and reliable.

Convenient speed controller gives change of speed, if desired, while engine is running.

Removable bushings in bearings.

Close speed regulation.

Ample positive lubrication.

Practically automatic in operation, requiring but little attendance—easily started and stopped. Run smoothly, quietly, cleanly.

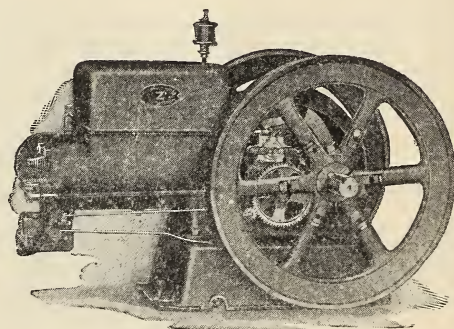
Furthermore, every bit of metal in these engines is effectively used to give greatest strength without excess weight. The crank shaft is of forged steel with extra large bearing surfaces—it is built for long life. The interchangeable die-cast liners in main and crank bearings are easy for you to replace if necessary. Need but little floor space—simple foundation.

Fairbanks-Morse Quality throughout.

1½ H. P. "Z" Engine, weight 265 lbs.
Price ----- \$79.10

3 H. P. "Z" Engine, weight 470 lbs.
Price ----- \$119.10

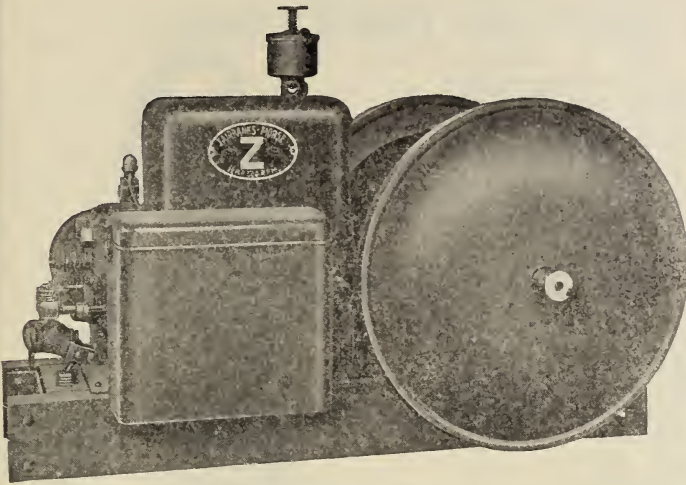
6 H. P. "Z" Engine, weight 865 lbs.
Price ----- \$192.50



3 H. P. "Z" Engine

WE OCCASIONALLY HAVE A BARGAIN IN GOOD USED ENGINES

PRICES SUBJECT TO CHANGE WITHOUT NOTICE



**NEW Z
Engine
A
Most
Remarkable
Engine Value
 $\frac{1}{2}$ H. P. Battery
Equipped
Fairbanks-Morse
Quality
Throughout**

SEVEN IMPORTANT FEATURES OF THE NEW Z ENGINE

1. Hopper cooled.
 2. Uses Gasoline fuel.
 3. High Tension Battery Ignition.
 4. Practically no adjustments required.
 5. Suction fuel feed simple and reliable.
 6. Convenient speed regulator.
 7. Removable liners in bearings.
- Weight ----- Price, \$55.85.

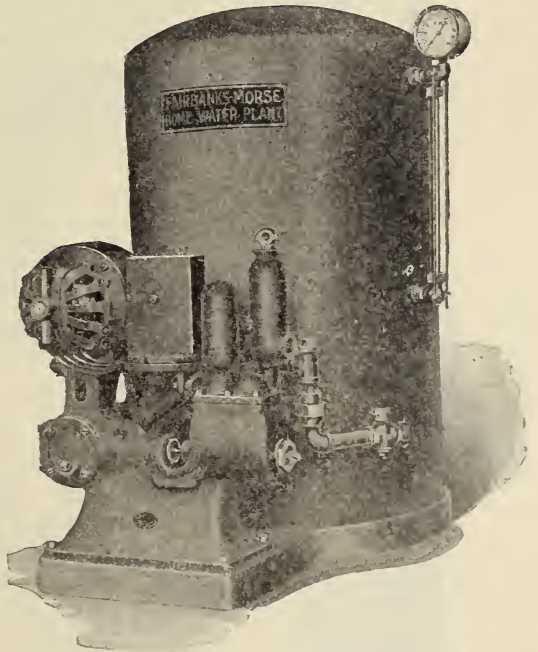
FAIRBANKS-MORSE HOME WATER PLANT AUTOMATIC

The very heart—the real basis—of all sanitation is running water. And sanitation is necessary to health, as all physicians will tell you.

The Fairbanks-Morse Home Water Plant brings sanitation and health to your home. Besides, it ends the drudgery of hand-pumping and carrying water in sloppy buckets. The plant operates from any light socket or home lighting plant circuit.

Pumps from spring, cistern, shallow well, stream or lake, UNDER PRESSURE. Noiseless.

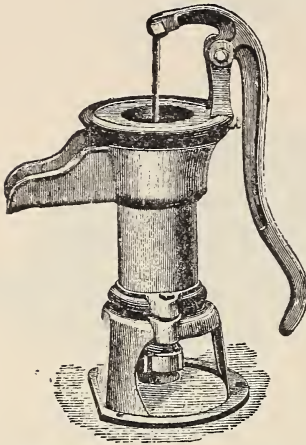
PRESSURE AUTOMATICALLY maintained. ENTIRELY automatic—no adjusting. Not even a switch to turn. Has galvanized steel tank and famous Fairbanks-Morse quality pump. FRESH WATER IS NEEDED FOR HEALTH and for a happy, comfortable home. Costs only a few cents a day to operate.



Home Water Plant with 35-gallon Tank, Capacity 200 gallons per hour, price	\$140.00
Home Water Plant with 70-gallon Tank, Capacity 200 gallons per hour, price	156.50
Home Water Plant with 35-gallon Tank, Capacity 400 gallons per hour, price	210.50
Home Water Plant with 70-gallon Tank, Capacity 400 gallons per hour, price	230.00

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PITCHER SPOUT AND FORCE PUMPS



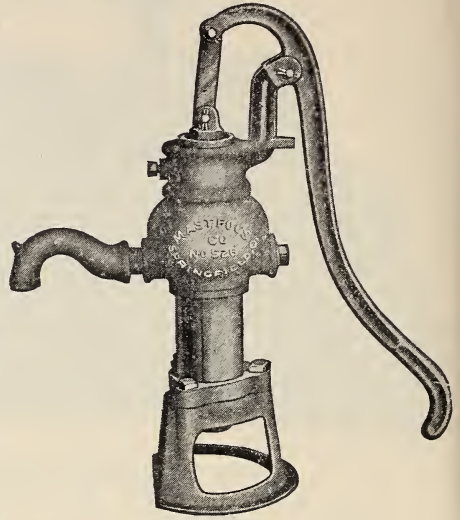
Pitcher Spout Pump

No. 67 Buckeye House Force Pump—

They are made for wells up to 20 feet in depth. The spout is provided with hose attachment to be used for sprinkling or fire protection. The body, or air chamber is provided with an extra outlet for attaching pipe leading to a tank. The handle can be swung around to any position for convenience of operator. Made with either polished iron or brass body cylinder.

No. 67 with 3-inch Iron Cylinder. Price \$10.00.

No. 67 with 3-inch Brass lined cylinder. Price \$12.25.



No. 67 House Pump

PITCHER SPOUT CISTERN PUMPS

These well-known pumps are suitable for cisterns and shallow water. Revolving stand enables handle to be turned in any direction. By raising handle to full height valves are tipped and prevented from freezing. They are made of good material and with all modern improvements attached.

No. 2—3 -in. cylinder; fits 1¼-in. pipe; price \$3.90

No. 3—3½-in. cylinder; fits 1¼-in. pipe; price \$4.25

No. 4—4 -in. cylinder; fits 1½-in. pipe; price \$5.25

BUCKEYE SET LENGTH FORCE PUMP

WITHOUT WINDMILL HEAD

No. 27—4 feet set length Force Pump, with 3x10-in. iron Cylinder, fitted with tight top which prevents substances from getting into pump. Polished steel piston rods and brass stuffing boxes. Hose connection spout. Brass thumb screw in air chamber and drip hole above cylinder to make pump anti-freezing. As listed, adapted to wells 28 feet deep. By lengthening pipe and rod and lowering cylinder near bottom, can be used in wells 100 feet in depth. There is none better.

The No. 27 pump takes place of No. 808 pump in our stock.

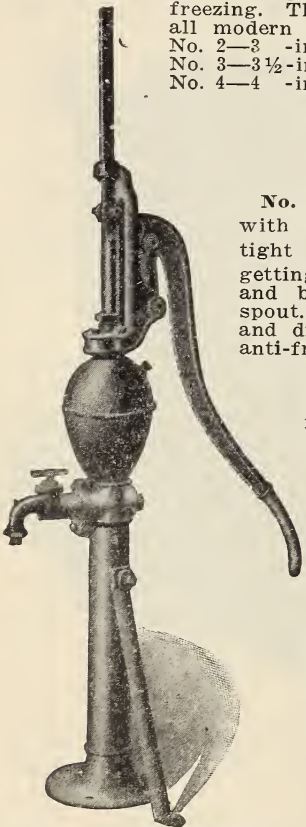
No. 27—Set Length Force Pump; weight, 81 lbs. Price -----\$12.50

No. 27 with porcelain lined cyl. \$13.75

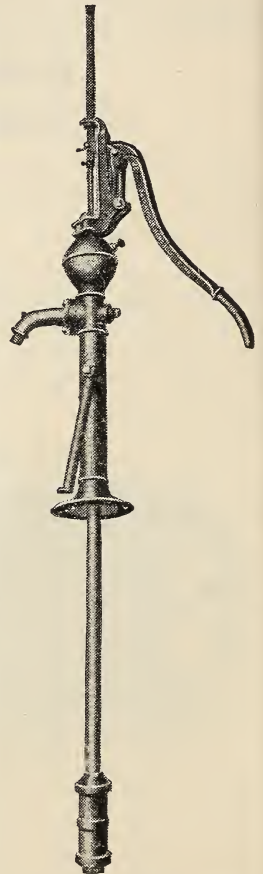
HOOSIER FORCE PUMP STANDARD

No. 945—Hoosier Pump Standard is constructed for use either by hand or gasoline engine by connecting through a belted pump jack or windmill. It is tapped in opposite side from the spout for connecting pipe leading to tank and are of heavy and substantial construction suitable for shallow or deep wells up to 300 feet. It comes regularly tapped for 2-inch pipe, but can be bushed for 1½ or 1¼-inch if desired (No cylinder.)

No. 945—Hoosier Pump Standard, wt., 82 lbs. Price -----\$16.50



No. 945 Pump Standard



No. 808 St Length Pump

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FORCE PUMPS—Continued

THE MYERS' LOW DOWN DOUBLE-ACTING FORCE TANK PUMP

Capacity, 2000 gallons per hour, 5x5 cylinder, fitted for hose and 2-inch pipe.

No. 470—Myers' Low Down Tank Pump. The construction of this pump is such that all the valves are located on top of the pump. Each valve can be reached independently by removing the individual cap immediately over it. This is a decided advantage, and not found in any other make of tank pump.

The valve seats are brass, with a full 2-inch water-way, which does not restrict the flow of water, and causes the pump to operate easily.

The valves are metal faced with rubber and are of the poppet type, which raise clear from the seat, preventing any foreign substance from lodging under them.

The cylinder is highly polished. The piston rod is made from 13/16-inch drawn polished steel, and has a heavy brass stuffing nut.

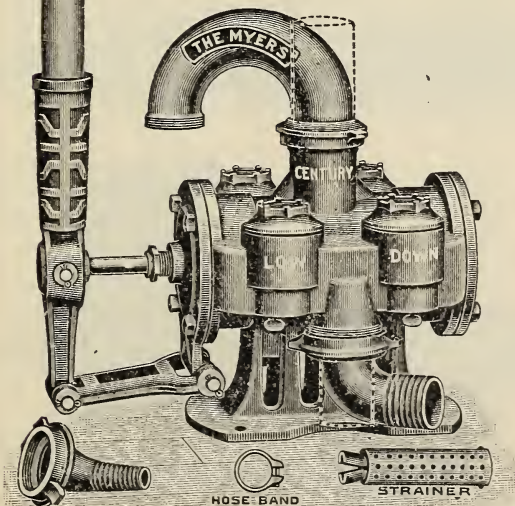
The handle is reversible; can be placed on either end, making it a right or left hand pump.

The suction and discharge ports are fitted for hose and threaded on the inside for 2-inch pipe.

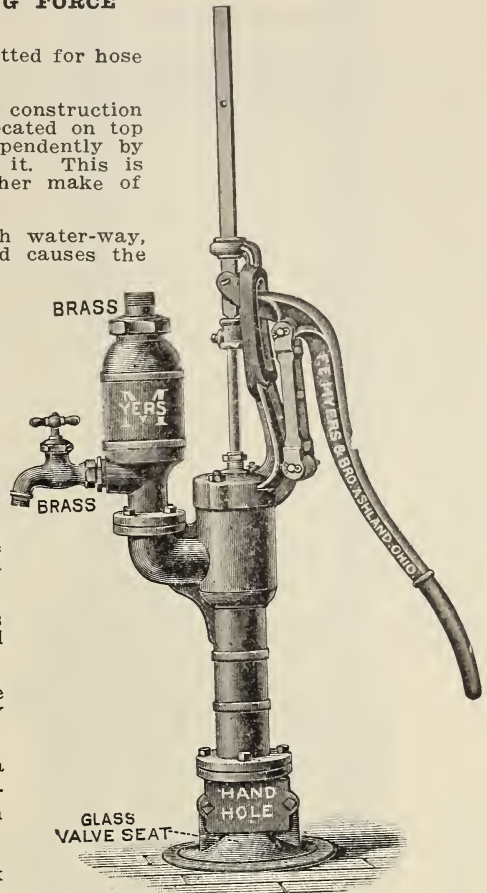
The base is separate from the pump, to which it is firmly bolted.

The above construction as a whole, we are satisfied, is superior to anything ever offered in the form of a tank pump.

No. 470—Myers' Low Down Tank Pump, with hose nipple, hose attachment, hose band and strainer; wt., 85 lbs. Price on application.



No. 470 Myers Tank Pump



No. 215½ Myers' Force Pump

No. 215½—Myers Well Force Pump, built with cylinder in the main pump stand, and check valve in the base. The pump is complete within itself, has brass piston rod, large air chamber and is fitted with a brass compression bibb cock. Has brass nipple in the top of air chamber for connecting discharge pipe. It is fitted with Myers patent glass valve seat. The handle and pump head are reversible, and can be located at any angle desired.

This pump is fitted with a hand hole, which permits the valve to be removed without disturbing the balance of the pump.

This pump is designed for suction depth wells only, and we do not recommend it for over 25 feet.

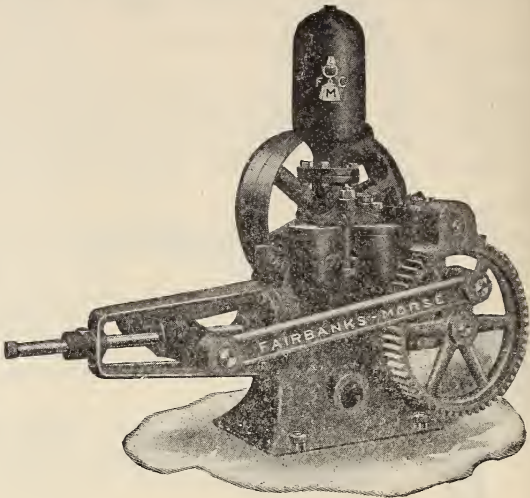
No. 215½—Myers Well Force Pump, with 3-inch polished cylinder, tapped for 1½-inch pipe, or can be bushed to 1¼-inch; weight 83 lbs. Price on application.

FAIRBANKS-MORSE TYPHOON POWER PUMPS

DOUBLE ACTING

These pumps are especially designed for use in mills and factories; also for use by market gardeners, farmers and ranchmen, as they are suitable for fire protection, drainage or irrigation. They are geared back in the proper ratio to secure best results for each size.

They are compact and easily accessible. They have a single cylinder lined with heavy brass tubing so it will not corrode or become rough, thereby cutting out packing of the piston. The piston rod is made of steel for strength, but covered with brass to prevent corrosion and consequent wear of the stuffing box packing. Any or all valves can be removed for inspection by simply loosening two nuts which allows the removal of two yokes and four valve covers, permitting free access to all valves without disturbing any other parts of the pump. All pumps are regularly fitted with rubber valves, but if the nature of the service requires, can be fitted with brass valves. Valve seats are of brass and screwed into the valve decks, similar to the construction of large, heavy duty pumps. All bearings are babbitt lined and gears are machine cut, insuring quiet running and durable pumps. Each pump has an air chamber of sufficient size to insure uniform flow from the discharge which can be turned to any quarter, as desired. The pistons are packed with cup leathers, except sizes 2x3 and 2½x5, which are designed to pump against 200 pounds pressure, these have pistons packed with square Flax packing.



Sizes and Capacities of Typhoon Double-Acting Power Pumps—Belt Driven

No.	Diameter Inches Cylinder	Stroke Inches	Speed R. F. M.	Capacity Gallons Per Min.	Pipe Sizes		Tight & Loose Pulleys Inches	Gear Ratio	Weight Pounds	Price
					Suction Inches	Dis. Inches				
505	2	3	60	4.67	1	¾	10x2 ¼	3-1	120	On Applica- tion
1484	3	3	60	10.78	1 ¼	1	10x2 ¼	3-1	125	
1515	2 ½	5	40	7.98	1 ½	1	16x4	5-1	400	
509	3	5	40	11.70	1 ½	1 ½	16x2 ¼	5-1	280	
468	5	5	40	33.01	2	2	16x4	5-1	450	

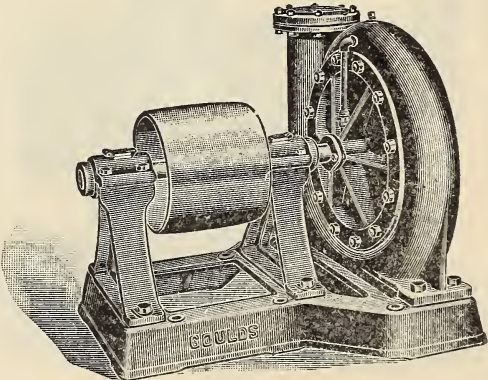
CENTRIFUGAL PUMPS

Fairbanks-Morse Centrifugal Pumps are so designed that the total head pumped against and the quantity of water handled, can be varied considerably without affecting the mechanical efficiency. The Impeller is of the open type, and they are so designed to minimize the end thrust. There is provided a thrust collar, which is securely fastened to the shaft and which bears against a babbitted surface in the bearing. The shaft is made of open hearth, high-carbon steel, accurately machined and of ample size to transmit the maximum power required.

SIZES AND CAPACITIES

Pump No.	Pipe Size Dis. In.	Pipe Size Suc. In.	Non-Cap.in. Gals.perMin.	Diam.& Face Pulley in In.	Floor Space Required In.	Domestic Ship'g Weight Lbs.
1	1	1 ½	30	4x 3	11 ¼ x 9 ½	35
1 ½	1 ½	2	70	5x 5	19 ½ x 12 ¾	90
2	2	3	120	6x 6	22 ¼ x 16	180
2 ½	2 ½	3	200	6x 7	24 ¾ x 19	250
3	3	4	270	7x 7	26 ½ x 22	375
4	4	5	470	10x10	33 ¼ x 29 ¼	500

Prices on application.



Fairbanks-Morse Centrifugal Pump

DOUBLE GEAR PUMP JACK

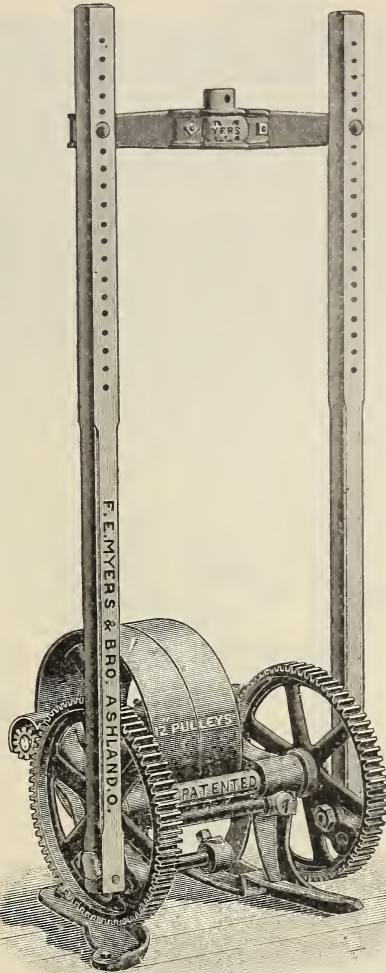
This double gear pump jack meets the demand for an extra strong jack for deep well work. It measures 13 inches between the large gear wheels, which especially adapt it for use with 3 way pumps. Made with double gears $1\frac{1}{2}$ inches wide, machine cut; wrist pins are 1-inch hard steel, shafts $1\frac{1}{2}$ inch drawn steel keyed to gears; side arms are of wood. The cross head is extra strong, made with a ball and socket joint to attach to pump rod. Pulleys are 12 inches in diameter with 3 inch face. Two strokes 6 and 9 inches. Back geared 6 to 1.

No. 426 Double Geared Pump Jack, weight 110 lbs. Price \$21.50.

Handy Pump Jack

The Handy Jack is furnished with a clamp by means of which you can easily attach it to any ordinary wind mill pump standard. It is double back geared and adapted for the heaviest work that should be put on any ordinary wind mill pump. The bearings of the Handy Pump Jack have large removable babbitt bushings which can be replaced when worn, and is supplied with compression grease cups for good, steady lubrication.

Handy Pump Jack—weight, about 120 lbs. Price, \$15.00



Universal Pump Jack

BRASS JACKET DRIVE WELL POINTS



No. 94—30-in. long, fits $1\frac{1}{4}$ -in. pipe; weight, about 7 lbs. Price	\$2.50
No. 98—36-in. long, fits $1\frac{1}{4}$ -in. pipe; weight, about 8 lbs. Price	3.00
No. 140—30-in. long, fits $1\frac{1}{2}$ -in. pipe; weight, about 8 lbs. Price	3.25
No. 160—24-in. long, fits 2 -in. pipe; weight, about 7 lbs. Price	4.00

GRAVEL DRIVE WELL POINTS



No. 302—30-in. long, fits $1\frac{1}{4}$ -in. pipe; weight, about 7 lbs. Price	\$2.50
No. 321—30-in. long, fits $1\frac{1}{2}$ -in. pipe; weight, about 8 lbs. Price	3.25

We carry a large stock of Cup and Valve Leathers and Pump Supplies

When writing for information give depth of well, height water is to be raised and quantity.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PATENT NON-SHRINKING WATER TANKS

With Round Steel Hoops and
Register

Made with a deep channel or groove in the top of the staves, which is filled with water from the patent cup outlet on the supply pipe, placed right over the edge of the tank. By keeping this groove full of water at all times, the staves are kept moist from top to bottom, whether the tank is full or only one inch of water in the bottom, and thereby shrinkage and leakage are prevented on these tanks.

All hoops are constructed of round milled steel with a tensile strength of 60,000 pounds per square inch, and all hoops are fitted with malleable iron adjustable lugs. Each section of hoop has a thread about five inches long on each end, which enables the tightening of the hoops in both directions. This is a great advantage over the flat hoops, which have to be driven, a job that is not very easily accomplished, or over the round hoops, where the different sections are fitted with a square head on one end, because such hoops only draw in one direction, and the hoops are always subject to an unequal tension.



California Redwood Non-Shrinking Water Tanks

With Round Hoops and Register

Capacity Gallons	Outside Diameter	Outside Height	Thickness	Approximate Weight	Approximate Measurement
500-----	5 ft. 1 in.	4 ft.	2 in.	446 lbs.	20 cu. ft.
1000-----	6 ft. 6 in.	5 ft.	2 in.	729 lbs.	30 cu. ft.
1500-----	7 ft.	6 ft.	2 in.	933 lbs.	50 cu. ft.
2000-----	8 ft.	6 ft.	2 in.	1065 lbs.	60 cu. ft.
2500-----	8 ft.	7 ft.	2 in.	1196 lbs.	70 cu. ft.
3000-----	9 ft.	7 ft.	2 in.	1346 lbs.	80 cu. ft.
4000-----	9 ft.	9 ft.	2 in.	1641 lbs.	83 cu. ft.
5000-----	10 ft.	9 ft.	2 in.	1855 lbs.	90 cu. ft.
6000-----	12 ft.	8 ft.	2 in.	2126 lbs.	100 cu. ft.
7000-----	12 ft.	9 ft.	2 in.	2323 lbs.	105 cu. ft.
8000-----	12 ft.	10 ft.	2 in.	2520 lbs.	110 cu. ft.
10000-----	13 ft. 8 in.	10 ft.	2 in.	2963 lbs.	130 cu. ft.

Prices on Water Tanks on Application

Washington Fir Non-Shrinking Water Tanks

With Round Hoops and Register

Capacity Gallons	Outside Diameter	Outside Height	Thickness	Approximate Weight	Approximate Measurement
500-----	5 ft. 1 in.	4 ft.	2 in.	560 lbs.	20 cu. ft.
1000-----	6 ft. 6 in.	5 ft.	2 in.	900 lbs.	30 cu. ft.
1500-----	7 ft.	6 ft.	2 in.	1020 lbs.	50 cu. ft.
2000-----	8 ft.	6 ft.	2 in.	1150 lbs.	60 cu. ft.
2500-----	8 ft.	7 ft.	2 in.	1385 lbs.	70 cu. ft.
3000-----	9 ft.	7 ft.	2 in.	1500 lbs.	80 cu. ft.
4000-----	9 ft.	9 ft.	2 in.	1765 lbs.	83 cu. ft.
5000-----	10 ft.	9 ft.	2 in.	2105 lbs.	90 cu. ft.
6000-----	12 ft.	8 ft.	2 in.	2340 lbs.	100 cu. ft.
7000-----	12 ft.	9 ft.	2 in.	2585 lbs.	105 cu. ft.
8000-----	12 ft.	10 ft.	2 in.	2830 lbs.	110 cu. ft.
10000-----	13 ft.	10 ft.	2 in.	3355 lbs.	130 cu. ft.

PUMP CYLINDERS

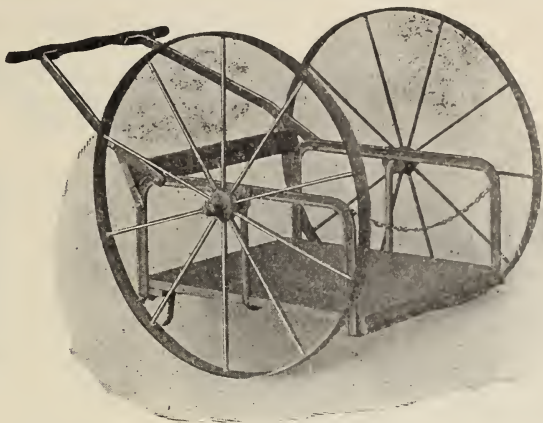


We carry in stock nearly all sizes and kinds of Pump Cylinders to meet with the different requirements.

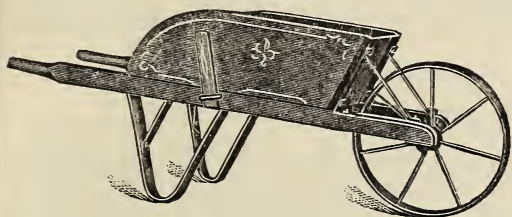
PLATFORM HAND CART

Platform Hand Cart. The superiority of this cart will be appreciated at a glance. It can be used for many purposes on the farm, in the creamery and elsewhere. By tilting the cart and using the handles as levers, barrels or other heavy packages may be lifted and loaded with ease. They are made wholly of steel except the platform, which are of hardwood. The wheels are 36 inches in diameter, strongly and substantially made, and fitted with removable boxes, cheaply and easily replaced in case of wear. Size of platform, 27x30 inches.

Platform Hand Cart, with 2-inch tires, wt., 95 lbs. Price ----\$13.75



Platform Hand Cart



NO. 1 AMERICAN GARDEN WHEELBARROW

These American Garden Barrows are made of wood and steel, which is combined in the simplest form to gain lightness and still maintain strength and correctness of design. The individual points of superiority are pressed angle steel sideboard holders, oval pressed steel legs, and 20 inch steel wheel, with 2 inch oval tire, solid steel axle and malleable boxes. It is strong, light and well manufactured. Finished in vermillion, hand striped and varnished and is better finished than any Garden Barrow made.

No. 1 American Garden Barrow, weight 50 lbs. Price \$8.50.

No. 2 American Garden Barrow, weight 56 lbs. Price, \$9.25.

No. 5 TUBULAR WHEELBARROW

Tray capacity 6 cu. ft. of earth.

Greatest Length, 40 inches.

Greatest width, 32 inches.

Greatest Depth, 13 inches.

No. 15 Steel. Wheel malleable iron with grease chamber in hub—non-turning axle bolt.

Handles—one piece tubular steel. This is a very popular wheelbarrow with the dairyman, for wheeling the litter from the barn.

No. 5 Tubular Wheelbarrow, weight each 78 lbs. Price, \$12.50.

\$16¹⁵

500 lb.
Size

F.O.B
Factory



THE CAPACITY IS CAST IN THE PLATFORM

The Genuine
FAIRBANKS SCALE
1000 lb. Size \$18⁹⁰
F.O.B Factory

*Your grandfather used a
Fairbanks Scale to protect
his buying and selling*

These low prices are made possible by volume production. See the scale at our store. We will show you the steel to steel bearings—arrow tip beam—large platform—wide wheels.

No. 1128—500 lbs. capacity. Price at our store \$23.50.

No. 1124—1000 lbs. capacity. Price at our store \$25.50.

Use a scale and check your weights. It will surprise you how quick you will pay for it.

PAINTS

Proof PRODUCTS

Sun-Proof house paint is designed especially to resist extreme weather changes. If properly applied it will not crack, chip, peel or deteriorate in any other way. Patton Sun-Proof Paint will cover more surface, gallon for gallon, than any ordinary mixed paint. The pigments are ground extremely fine and therefore sink in and grip the surface of the wood, thus holding tighter and lasting longer. Made in 32 distinct colors.

Outside white, Kentucky green and Copper Verde, 5 gallons, \$3.90 per gallon; 1 gallon, \$3.95; ½-gallon, \$2.05; ¼-gallon, \$1.10; ⅛-gallon, 60c.
 Inside White and all colors, 5 gallons, per gallon \$3.75; 1 gallon, \$3.80; ½-gallon, \$2.00; ¼-gallon, \$1.05; ⅛-gallon, 55c.

PORCHITE PAINT

Patton's Porchite is especially manufactured for exterior use on surfaces subjected to wear, such as Porch floors, Boat decks, etc. It is exceedingly tough and elastic, and it is not affected by snow, rain, or sun, and colors will remain permanent. Made in 5 selected colors. Price per gallon, \$3.80; ½-gallon, \$2.00; ¼-gallon, \$1.05.

PATTON'S FLORHIDE PAINT

Patton's Princess Floorhide is made especially for the protection and decoration of interior floors, whether cement, concrete, or wood. It is a varnish paint and dries with a nice gloss. Send for color card and complete information on the use of Patton's Floorhide. Made in 8 colors. Price per gallon, \$3.65; ½-gallon, \$1.90; ¼-gallon, \$1.00.

PATTON'S VELUMINA

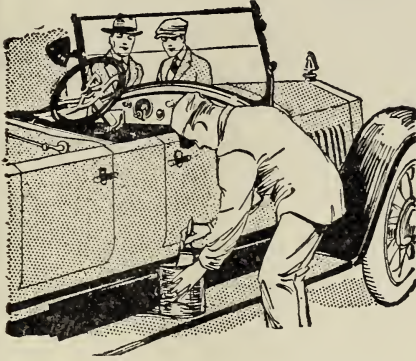
Velumina is an OIL FLAT WALL Paint that gives the wall of your home a delicate velvet-like color. Velumina is washable and therefore it saves the cost of frequent re-decorating. It can be repeatedly washed and after each washing the color will be restored to its original brilliancy and cleanliness.

With Velumina you can produce very artistic interiors. Some of the largest buildings in America are finished with it. The Woolworth building for example. Made in white and 16 different colors. Price per gallon, \$3.55; ½-gallon, \$1.85; ¼-gallon, \$1.00; ⅛-gallon, 55c; 1/16-gallon, 30c.



PAINTS AND VARNISHES

PATTON'S AUTO GLOSS



It is easy to refinish your car with a brush and a can of Auto Gloss; and a dollar or two spent for Auto Gloss makes your car worth \$100.00 more. AUTO GLOSS dries with a smooth, hard, mirror-like finish that is unaffected by the weather or flying grit from the road. It will resist bumps and knocks remarkably well. This elasticity means that even though a car is dented the varnish will not crack. PATTON'S AUTO GLOSS is made in 16 different shades.

Navajo and Chassis Red, Price for ¼-gallon, \$2.15; ½-gallon, \$1.20; 1/16-gallon, 70c; 1/32-gallon, 35c.
 Black and Clear, Price for ¼-gallon, \$1.65; ½-gallon, 95c; 1/16-gallon, 55c; 1/32-gallon, 35c.
 All other colors, Price for ¼-gallon, \$1.90; ½-gallon, \$1.05; 1/16-gallon, 65c; 1/32-gallon, 35c.

WATERSPAR VARNISH

The water-proof, sole-proof varnish. Why scrub your floors when you can clean with a damp cloth? Waterspar Varnish applied to the floor makes scrubbing unnecessary as well as giving a very firm, durable finish that you will be proud of. A coat of Waterspar on old furniture will make it look like new—a new set of furniture with the price of a can of Waterspar. We also make FLOORSPAR for floor, Linoleums, and of same high quality as Waterspar.



Water or Floorspar, per gal., \$5.25; ½-gal., \$2.85; ¼-gal., \$1.50; ⅛-gal., 85c; 1/16-gal., 50c



Let the
 little
PITCAIRN
 Fixer
 do it.

PITCAIRN SOLE-PROOF

This line includes:

- 7 transparent colored varnishes.
- 1 clear finish varnish.
- 8 opaque enamels.
- 1 dull black enamel.
- 1 gold bronze.
- 1 Aluminum bronze.
- 1 white and 1 colored undercoater.

Here you will find a product suitable for every household need. Pitcairn Sole-Proof colored varnishes cover a large amount of surface, producing a clear and brilliant finish that will give long service. The finish dries so hard

and tough that it can be hammered and abused, yet remain firm and unbroken.
 Fore Sole-Proof Clear, Dark Oak, Light Oak, Walnut, Cherry, Flat and Gloss Black
 Prices, 1-gal., \$5.25; ½-gal., \$2.85; ¼-gal., \$1.50; ⅛-gal., 85c; 1/16-gal., 50c; 1/32-gal., 30c
 For Mahogany, Vernal Green, Ivory, Pearl Grey, Pale Blue, Fern Green, White:
 Prices, 1-gal., \$5.50; ½-gal., \$2.95; ¼-gal., \$1.55; ⅛-gal., 90c; 1/16-gal., 50c; 1/32-gal., 30c.
 For Rich Cherry, 1-gal., \$7.00; ½-gal., \$3.65; ¼-gal., \$1.95; ⅛-gal., \$1.05; 1/16-gal., 60c;
 1/32-gal., 35c.
 For Ground Color, 1-gal., \$4.50; ½-gal., \$2.40; ¼-gal., \$1.30; ⅛-gal., 75c; 1/16-gal., 45c;
 1/32-gal., 25c.

Graining Sets—Do your own graining—Price, 60c each.

PITCAIRN WOOD STAINS

Pitcairn Wood Stains are suitable for use on any woods, close or open grained. The more beautiful the wood the more pleasing the effect. One gallon will cover from 800 to 1000 square feet surface. Pitcairn Wood Stain is an oil stain and may be had in 10 different colors. Write us for prices. Wood stain color samples mailed on request.

PITCAIRN TECTOR

THE RIGHT FOUNDATION

THE GREAT UNDERCOATER

Pitcairn Tector cannot be classed with any other undercoat material. It is nothing less than a wonderful paint discovery. We want to tell you more but owing to lack of space we cannot. Write for free booklet on Tector. Will mail on request.

Pitcairn Tector, Price, 1-gal., \$3.55; ½-gal., \$1.85; ¼-gal., \$1.00; ⅛-gal., 55c.

INDUSTRIAL BUILDING AND BARN PAINT

Made especially for warehouses, factory buildings, elevators, BARNs, roofs, either metal or wood and all exterior painting where a good, durable and economical paint is required. Has greater covering capacity than ordinary paints or those mixed by hand. There are 6 clear toned colors from which to select.

Industrial Building Paint in Red or Brown, 1-gal., \$2.65; ¼-gal., 75c.

Industrial Building Paint, Yellow, Gray, Green, 1-gal., \$3.20; ¼-gal., 90c.

On orders of 5 gallons of one color, reduction of 5c per gallon.

BANZAI ENAMEL

1. Best body. 2. Best covering. 3. Best flowing. 4. Whitest white, 5. Most brilliant. 6. Greatest durability.

The 6 points as given are absolutely true of Banzai Enamel and means in addition, the surety of smooth drying finish which make for ease in cleaning. Can be tinted for making any light shade, whether Ivory, Grey, Green, Brown, etc

Banzai Enamel Undercoater, per gal., \$5.00; ½-gal., \$2.65; ¼-gal., \$1.45; ⅛-gal., 80c; 1/16-gal., 45c.

Banzai Enamel Egg Shell, per gal., \$8.00; ¼-gal., \$2.35.

Banzai Enamel Gloss, per gal., \$8.00; ½-gal., \$4.25; ¼-gal., \$2.35; ⅛-gal., \$1.25; 1/16-gal., 70c.

VARNISH REMOVER

Pitcairn Varnish Remover, 1-gal., \$2.50; ½-gal., \$1.50; ¼-gal., 75c; ⅛-gal., 50c; 1/16-gal., 30c.

We stock a large assortment of BRUSHES both for painting and varnishing. Owing to lack of space we are unable to list them here. Prices and quality are right.

LEAD, OILS, TURPENTINE

Dutch Boy White Lead, 1 lb., 20c; 5 lbs., 12½ lbs., 25 lbs., 50 lbs., 100 lbs.

Orders for White Lead filled at market price the day received.

Raw Linseed Oil—Any quantity from 1 quart to 100 gallon—Market price.

Boiled Linseed Oil—Any Quantity from 1 quart to 100 gallons—Market price.

Turpentine—Orders filled any quantity—Market price.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

SEND FOR BOOK: PROFITABLE PAINTING FOR BUILDING OWNERS



Labor —that's the Big Cost in Painting

LABOR accounts for about three-quarters of the entire cost of a painting job. Materials cost only about one-quarter—so the possible saving in cost between the best and the cheapest materials is not worth considering.

And by specifying the best paint, and getting years of extra wear, you save the big labor cost of frequent re-painting. You get the most economical job in the end.

Patton's Sun-Proof Paint

—is longer-lasting because it is richer in linseed oil. It will not chalk, peel or blister if applied to surfaces fit for painting. It forms a tough film of protection against time and weather.

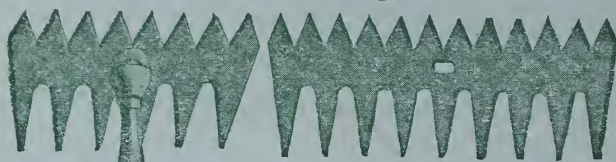
Let us tell you more about this cut-cost paint.

Our Mr. John W. Jones will do all that is possible to assist you... Just ask him.

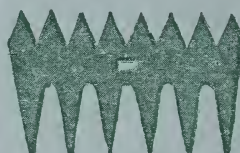


Use The MULTITOOL

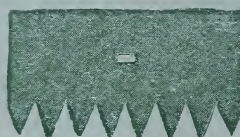
The Ball Bearing Hoe



No. 1



No. 2



No. 3



No. 4



No. 5



No. 6



No. 7

Multitool with Blade No. 2

Universal Joint and Handle

THE BEST HAND IMPLEMENT
ON THE EARTH